

Medical data is for informational purposes only. You should always consult your family physician, or one of our referral physicians prior to treatment.

### Table of Arthritides' Symptoms and Their Classifications\*



**Table I: Collagen Tissue Diseases (Rheumatoid Diseases), and Associated Rheumatic Disease Conditions**

Collagen Tissue is the main organic constituent of connective tissue and of the organic substance of bones. As such, it is pervasive throughout the human body.

Clinical Name of Disease

Symptoms , Onset and Body Locations

**Acute Cholecystitis**  
**Acute Meningitis**  
**Acute Pancreatitis**  
**Adenoid Hyperplasia**

See Table II.  
 See **Headache**, Table I and Table II.  
 See **Pancreatitis**, Table I.

**Adenoid Hyperplasia** is enlargement of adenoidal tissue due to lymphoid excessive proliferation of normal cells in a normal arrangement (hyperplasia). This condition occurs in children and may be physiologic or secondary to infection or allergy. Obstruction of the eustachian tubes may result in recurrent acute, chronic, or secretory (serous) otitis media. Obstruction of the passageway between the nose and pharynx (choana) may cause mouth breathing, a hyponasal voice and pus forming or running in the nostril (purulent rhinorrhea).

See **Hypersensitivity Pneumonitis**, Table I.

**Allergic Interstitial Pneumonitis**  
**Alopecia**

Partial or complete loss of hair resulting from genetic factors, aging, or local or systemic disease, such as seborrheic dermatitis and **Psoriasis**. See **Psoriasis**, Table I.

**ALS**  
**Amyloid Arthropathy**  
**Amyloidosis**

See **Amyotrophic Lateral Sclerosis**, Table I.  
 See **Amyloidosis**, Table I.

Amyloid resembles starch, and is a white insoluble protein substance found as an abnormal deposit in various organs. Homeogenous, translucent and colorless, it consists of protein-carbohydrate fibrous or filamentous (fibrillar) amyloid in amounts sufficient to impair normal function of the tissues or organs. The appearance of **Amyloidosis** may or may not be associated with a specific disease. It can be found associated with chronic diseases such as tuberculosis, Alzheimer's disease, dilatation of the bronchial tubes (bronchiectasis), inflammation of the bone and marrow (osteomyelitis), leprosy, marrow plasma cell tumors (multiple myeloma), lymph system cancer (Hodgkin's disease) and other tumors, or inflammatory **Rheumatoid Arthritis**. In primary **Amyloidosis** -- without associated disease -- the heart, lung, skin, tongue, thyroid gland and intestinal tract may be involved. Localized amyloid "tumors" may be found in the respiratory tract or other sites. The liver, spleen, kidney and vascular system are frequently involved. In secondary **Amyloidosis** -- with associated disease -- there is a predilection for the spleen, liver, kidney, adrenal glands and lymph nodes. However, no organ is spared and vascular involvement may be widespread. The liver and spleen are enlarged, firm and rubbery. Kidneys are usually enlarged. Sections of the spleen show large, translucent, waxy areas. **Amyloid** associated with certain tumors (multiple myeloma) may be widespread and may show unique sites of involvement, or the Amyloid may be a local occurrence associated with some malignancies. Symptoms are non-specific and will often originate in the organ or system affected by the **Amyloid** tissues. There are, therefore, different, distinct pathologic signs and symptoms depending upon the organ or system affected. Some forms may resemble cardiac failure, or nerve dysfunction (peripheral neuropathy), skin disease, or **Hashimoto's** or **Reidel's Struma**. **Amyloid Arthropathy** may mimic **Rheumatoid Arthritis** in some cases of multiple myeloma (Cancer). Secondary **Amyloidosis** recovery depends on successful treatment of the underlying disease. If successful, then, **Amyloidosis** can be arrested.

See **Muscular Atrophies**, Table I.

See **Allergic Purpura**, Table II.

See **Anemia, Pernicious**, Table I. Also see **Splenomegaly**, Table I.

**Amyotrophic Lateral Sclerosis**  
**Anaphylactoid Purpura**  
**Anemia of Chronic Blood Loss**  
**Anemia, Pernicious**

A gradually increasing increase in size of red corpuscles (macrocytic) and lowered color index of blood (hypochromic) anemia with usually deficient supply of hydrochloric acid (achlorhydria) and a deficiency of a specific factor with enzyme-like properties present in normal gastric juice, called "intrinsic factor," or "Castle's Intrinsic." This factor interacts with food to produce the antipernicious anemia principle which is required to transport B<sub>12</sub> across the intestinal mucosa. Anemia develops in most patients insidiously and progressively as large liver (hepatic) stores are depleted. Gastrectomy, Chronic **Atrophic Gastritis**, Table I, and **Myxedema**, Table I, may also cause deficiency. Competition for B<sub>12</sub> may also occur from invasive organisms. Absorptive sites in the Ileum may be destroyed by inflammatory **Regional Enteritis**, surgical resection, or because the producing cells are congenitally absent. There are other causes, such as malabsorption syndromes, chronic pancreatitis and use of various drugs. Enlargement of the spleen (**Splenomegaly**, Table I) and liver (**Heptomegaly**, Table I) may sometimes be seen. Various gastrointestinal manifestations may be present, including loss of appetite (anorexia), intermittent constipation and diarrhea, poorly localized abdominal pain, a sensation of burning of the tongue (glossitis), and weight loss. A transient burning or prickling sensation (paresthesia) may be felt in the upper extremities, or other peripheral nerve sensations (periph-

Medical data is for informational purposes only. You should always consult your family physician, or one of our referral physicians prior to treatment.

eral neuropathy), and irritability, mild depression, delirium and paranoia may occur. The spinal cord may be involved with a loss of vibratory sensation in the lower extremities, loss of position sense, and loss of muscle coordination (ataxia). There may also be spasticity, hyperactive reflexes and other signs. **Hypothyroidism** and **Adrenal Insufficiency** may occur in association with **Pernicious Anemia**, suggesting an autoimmune basis for the gastric mucosal atrophy. Also see **Spleenomegaly**, Table I and **Hepotomegaly**, Table I.

### **Ankylosing Spondylitis**

Inflammation and gradual abnormal immobility and consolidation of a joint (ankylosis) primarily of the spine and beside the spinal (paraspinal) structures. Calcification and eventual conversion into a bony substance (ossification) of the fibrous ring (annulus fibrosus) of the intervertebral discs, and of adjacent connective tissue are characteristic. Fully developed conditions may involve the sacroiliac, the vertebrae joints and the soft tissues surrounding the joints. Onset is usually in patients aged 10 to 30 and is uncommon after age 30. More than 90% affected are male. That there is a genetic relationship has been suggested through genetic markers [HLA-B27(W27)]. Onset is usually insidious with episodes of aching restricted to the low back, especially the sacroiliac and lumbar regions. Pain is distributed in the region of the sciatic nerves. There may be well-defined morning stiffness. Symptoms become progressively worse with time, spreading from the low back, frequently into the mid back, and occasionally into the neck. Some peripheral joints may be affected in later stages, especially large joints such as the hips and shoulders (about 1/3 of cases), and less frequently, the knees and other more peripheral joints. Fatigue, weight loss, mild anemia, and muscle stiffness may occur in severe disease. Inflammation of the eye (**Iritis**, Table I) (less than 25% of cases) and involvement of the heart (cardiac) (less than 10% of cases), including cardiac abnormalities (arrhythmias) or aortic insufficiency. See **Ulcerative Colitis**, Table I.

See **Uveitis**, Table I.

See **Regional Enteritis**, Table I.

### **Anterior Uveitis**

### **Aphthous Stomatitis**

### **Arthralgia**

Pain in a nerve, or radiating along a nerve (Neuralgia) or pain in a joint.

### **Asthma**

Reversible airways obstruction which can occur secondarily to a variety of stimuli. A person may suffer from subclinical symptoms. Stress may precipitate an overt attack. These stresses may include viral respiratory infections; exercise, emotional upset, changes in barometric pressure or temperature, inhalation of cold air or such irritants as gasoline fumes, fresh paint and other noxious odors, or cigarette smoke, and exposure to specific allergens, as well as psychological factors. About 10 to 20% of the adult population suffer from "extrinsic asthma," exposure to airborne pollens and molds, house dust, and animal danders. Perhaps 30 to 50% of adult asthmatics have episodes triggered by nonallergenic factors (infection, irritants, emotional factors), or "intrinsic asthma." Presents with coughing, rapidity of respiration (Tachypnea), shortness of breath which is sometimes painful (dyspnea), tightness of pressure in the chest, and wheezing.

### **Atrophic Gastritis (with iron deficiency)**

Acute or chronic inflammation of the gastric mucosa. Wasting away or diminution in the size of cell, tissue, organ or part of the gastric cells, often with inflammation. Patients complain of nausea and pain, also in the upper middle portion of the abdomen, over or in front of the stomach (epigastric distress). There is lack of hydrochloride acid (hypochlorhydria) at least in sections of the gastric mucosa.

See **Atrophic Gastritis** (with iron deficiency), Table I.

**Autoimmune Thyroiditis** Table I. See **Hashimoto's Thyroiditis**, Table I. (Also similar to **Primary Myxoedema**, Table I; or **Spontaneous Myxoedema** -- without goitre, Table I.) See **Hyperthyroidism**, Table I.

### **Basedow's Disease**

**Bell's Palsy** Sudden onset of facial paralysis, presumed to be a swelling of the nerve due to immune or viral disease, whence compression on the facial nerve creates the disturbance. Pain behind the ear may precede the facial weakness, which can develop to complete paralysis in a matter of hours. The involved side is flat and expressionless, and patients may complain about the seemingly twisted intact side rather than the side involved. In severe cases the patient cannot close the eye. A lesion near one of the nerves (proximal) may affect salivation, taste and tears (lacrimation) and may also result in an abnormally acute sense of hearing, or a painful sensitiveness to sounds (hyperacusis). Also see **Lyme Arthritis Disease**, Table II.

See **Asthma**, Table I.

See **Lymphoma**, Table I.

### **Bronchial Asthma**

### **Burkitt's Lymphoma**

### **Bursitis**

Acute or chronic inflammation of a bursa, the saclike cavity with fluid that surrounds the location where tendons pass over bony prominences. **Bursitis** may be caused by trauma, acute or chronic infection, inflammatory **Arthritis**, **Gout** or **Rheumatoid Arthritis**. Acute **Bursitis** is characterized by pain, local tenderness, and limitation of motion. Swelling and redness is frequently present if the bursa is superficial. Chronic **Bursitis** may follow prior attacks, or repeated trauma or foci of infection. The bursal wall is thickened, with degeneration of the tissue surrounding the bone (endothelial lining). The bursa may eventually contain adhesions, threadlike processes from the synovial membrane (villi), calcium (calcareous) deposits and muscle atrophy. Pain, swelling, tenderness, muscle weakness and limitation of motion vary.

Medical data is for informational purposes only. You should always consult your family physician, or one of our referral physicians prior to treatment.

Attacks may last from a few days to several weeks, with multiple recurrences. Tendon or muscle tears must be ruled out, as well as inflammation of the bone marrow (osteomyelitis), tuberculosis, and cellulitis.

**Candidiasis** See **Candidiasis**, Table II, and **Regional Enteritis**, Table I.

**Carcinoma**

A tumor occurring in the covering of the skin and mucous membranes (epithelium) which tends to spread to other organs (metastasize) throughout the body.

**Cardiac**

See **Rheumatic Fever**, Table II. Also involves heart **Dysrhythmias**, Table I, **Myocardial Disease**, Table I, and **Pericardial Disease**, Table I.

**Cardiomyopathy**  
**Carpal Tunnel Syndrome**

See **Myocardia**, Table I.

One of a number of single or multiple nerve conditions involving sensory, motor, reflex, or blood vessel contraction and expansion (vasomotor) functions, is called **Peripheral Neuropathy**, Table I. In this classification is found **Carpal Tunnel Syndrome**, which is an entrapment of a middle (median) nerve compressed between the wrist (longitudinal carpal ligament) and hand muscles and a ligament that is perpendicular, passing across the wrist (transverse carpal ligament.). With **Carpal Tunnel Syndrome** there is wrist pain, an abnormal, burning or prickling sensation (paresthesia and sensory deficit) radiating from the palm of the hand (radial-palmar) and weakness of thumb opposition. Although infectious agents may be responsible, this condition is considered a symptom complex rather than a disease entity. Diabetes, mechanical trauma, surgery for tumors or ruptured intervertebral discs can also cause the problem. **Arthritis**, Table I, **Fibrositis**, Table I, and **Dermatomyositis**, Table I, may also simulate the condition. **Carpal Tunnel Syndrome** usually recovers rapidly with treatment, but may recur if the cause is not avoided. Recovery may be incomplete, with sensory, motor, or blood vessel motor nerve (vasomotor) residual symptoms, and in severe cases there can be chronic muscular atrophy as well.

**Celiac Disease**

A chronic intestinal disorder caused by intolerance to gluten. Cereals, for example, will bring about an insidious onset of symptoms after ingestion. Age of onset is typically 6 to 18 months, though symptoms may appear or reappear from age 20 to 50. There is depression, abdominal distention and muscle wasting. Stools are usually soft, pale and malodorous. May have attacks of vomiting, and tests may show iron deficiency.

**Celiac Sprue**  
"Charleyhorses" sand Leg Aches  
**Chlorosis**  
**Chronic Discoid Lupus Erythematosus**  
**Chronic Hepatitis**

See **Celiac Disease**, Table I.

See **Fibrositis**, Table I.

See **Anemia, Pernicious**, Table I.

See **Cutaneous Lupus Erythematosus**, Table I.

**Chronic Hepatitis** is a spectrum of disorders which merge into acute hepatitis on the one hand and cirrhosis on the other. Ongoing hepatitis for at least 6 months is generally considered necessary to be labeled as "Chronic." Nonspecific malaise, loss of appetite (anorexia), and fatigue often dominate the clinical picture. Jaudice is variable but not always present. Signs of enlargement of the spleen (**Splenomegaly**), fluid retention and a pigmented patch on the skin (spider nevi) usually develop. Multisystemic or "immune" manifestations often occur, especially in young women. These can affect virtually any body system and include acne, abnormal or absent menses (amenorrhea) arthralgia, ulcerative colitis, pulmonary fibrosis, inflammation of the kidney (nephritis) and blood problems related to loss of hemoglobin (hemolytic anemia). Liver biopsy is essential for definitive diagnosis.. See **Splenomegaly**.

**Chronic Lymphocytic Thyroiditis**

See **Hashimoto's Thyroiditis**, Table I. (Also similar to **Primary Myxoedema**, Table I; or **Spontaneous Myxoedema** -- without goitre, Table I.)

**Chronic Pyelonephritis**  
**Coeliac Disease**  
**Cogan's Syndrome**  
**Collagen Tissue Disease**

See **Acute Pyelonephritis**, Table I.

See **Celiac Disease**, Table I.

See **Polyarteritis**., Table I.

A disease of the main organic constituent of connective tissue and of the organic substance of the bones.

Inflammation of the delicate membrane that lines the eyelids.

**Conjunctivitis**  
**Corpus Luteum Cyst**  
**Cranial Arteritis**  
**Crohn's Disease**  
**Cutaneous Lupus Erythematosus**

See **Ovarian Cyst**, Table I.

See **Polymyalgia Rheumatica**, Table I.

See **Regional Enteritis**, Table I.

A chronic and recurring condition affecting the skin, and characterized by discolored spots or stains and plaques displaying a skin redness due to congestion of capillaries (erythema), hair follicle plugging, scales, dilatation of small capillaries and minute arteries which form small tumors (angioma), and atrophy. This condition is often divided into lesions above the skin, and those lesions affecting the rest of the body. Exposure to sunlight frequently precedes the initial appearance of lesions. The disease is more

Medical data is for informational purposes only. You should always consult your family physician, or one of our referral physicians prior to treatment.

common in females, appearing most often during their 30s. Active lesions may persist or recur for years. Initially they are round and scaling 5 to 10 mm in diameter, with follicular plugging. They appear most frequently on the cheek, bridge of the nose, scalp, and external auditory canal, as well as the ear lobes (pinnae). The lesions may be generalized over the upper portion of the trunk and extremities. Mucous membrane involvement is unusual, and the lips and mucosa are occasionally involved. If left untreated, the condition gradually extends peripherally. Permanent loss of hair may occur. Mild and transitory systemic manifestations, such as **Arthralgias**, are common. Reduction in leukocytes (**Leukopenia**, Table I) is frequent. Patients with extensive lesions are more likely to have symptoms similar to **Systemic Lupus Erythematosus**, Table I. Although the disease is one of the skin in 90% of those affected, 10% will develop systemic manifestations, and 5% will develop **Systemic Lupus Erythematosus**, Table I.

See **Uveitis**, Table I.

**Cyclitis**

**Cysts**

Usually an abnormal structure resulting from developmental anomalies, obstruction of ducts, or from parasitic infection.

See **Splenomegaly**, Table I.

See **Polymyositis**, Table I.

See **Sarcoidosis**, Table I.

**Cytopenia**

**Dermatomyositis**

**Diabetes Insipidus**

**Diabetes Mellitus**

A syndrome characterized by abnormal insulin secretion and various metabolic and vascular manifestations as shown by inappropriately higher blood glucose levels, thickened capillaries, accelerating atherosclerosis and nerve disease (neuropathy). Numerous laboratory measurements have been made of various physiological factors, but, it seems, no definitive early warning test has yet been found. **Diabetes Mellitus** consists of a set of symptoms that vary from insulin shock to a coma produced by incomplete metabolism of fatty acids (ketosis). Symptoms for Ketosis, or Ketoacidotic Coma are: Insulin is insufficient, the onset is gradual by days, there may be preceding illness or stress. Physical examination will present appearance as extremely ill, skin as dry and flushed, there may be infection and fever. Gastrointestinal symptoms may present with a mouth that is dry, thirst intense, hunger that is absent, common vomiting, and frequent abdominal pain. Respiration may be exaggerated, air hungry. The breath will have an acetone odor, and blood pressure will be low, pulse weak and rapid, eyeballs soft. In insulin shock, food intake may be insufficient, insulin excessive, and onset more gradual. Illness may be absent. Physical appearance will present as very weak appearance, moist and pale skin, absent infection, but hypothermia may be present. Gastrointestinal symptoms present as a drooling mouth, absent thirst, occasional hunger, rare vomiting, and no abdominal pain. Respiration will be normal or shallow, blood pressure normal, and acetone odor of breath very rare. Blood pressure will be normal, pulse as full and bounding, and eyeballs normal. The earliest symptom of elevated blood glucose is an excessive secretion and discharge of urine containing increased solids (polyuria). Continued excessive sugar in the blood (hyperglycemia) and urine (glucosuria) may lead to thirst, hunger and weight loss. Excess sugar in the urine may lead to fungal infection of the vagina and itching. Accelerated fat catabolism in certain patients produces loss of appetite (anorexia), nausea, vomiting, air hunger, and, if untreated, coma and death. Onset tends to be abrupt in children and insidious in older patients. Additional factors complicate this condition, such as large vessel atherosclerosis and microvascular disease. Diabetic disease of the retina (retinopathy) is usually detected 5 years or more after diagnosis of **Diabetes Mellitus**, but is present to some degree by 10 years in 50% of patients. Nerve involvement may be characterized by lancinating pain, and there can be other presenting or laboratory symptoms.

See **Hypersensitivity Pneumonitis**, Table I.

**Diffuse Hypersensitivity Pneumonia**

**Diffuse Lymphocytic Thyroiditis**

See **Hashimoto's Thyroiditis**, Table I. (Also similar to **Primary Myxoedema**, Table I; or **Spontaneous Myxoedema**-- without goitre, Table I.)

See **Herniated Nucleus Pulposus**, Table I.

See **Cutaneous Lupus Erythematosus**, Table I.

See **Multiple Sclerosis**, Table I.

**Disc Syndrome**

**Discoid Lupus Erythematosus**

**Disseminated Sclerosis**

**Dysrhythmias**

Abnormality of heart rhythm. Also see **Myocardia**, Table I, **Pericardia**, Table I, and **Rheumatic Fever**, Table II.

See **Ulcerative Colitis**, Table II.

**Episcleritis**

**Erythema Nodosum**

See **Sarcoidosis**, Table I ; also **Ulcerative Colitis**, Table II; also **Allergic Purpura**, Section II.

**Esophageal Webs**

Esophageal webs may develop in patients with iron deficiency anemia, or without an overt anemia. They are usually located in the upper esophagus and produce difficulty in swallowing (dysphagia) solid foods. The webs disappear with treatment of the anemia.

**Exophthalmos**

Medical data is for informational purposes only. You should always consult your family physician, or one of our referral physicians prior to treatment.

Extrinsic Allergic Alveolitis  
Fetal and Ovum Abnormalities  
Fibromyalgia

Protrusion of one or both eyeballs resulting from orbital inflammation, swelling (edema), tumors, or injuries; cavernous sinus thrombosis; or enlargement of the eyeball as in congenital glaucoma and unilateral high myopia. **Hyperthyroidism**, Table I, swelling (edema) and lymphoid infiltration of the orbital tissues may cause **Exophthalmos**. Sudden onset is usually due to hemorrhage or inflammation of the orbit, or sinuses. A 2 to 3 week onset suggests chronic inflammation or orbital pseudotumor, a slower onset suggests an abnormal tumor growth (neoplasm). Trauma or infection may cause a sinus blood clot (thrombosis), with one or more protrusions. Pulsations, with a sound or murmur (bruit), may be observed.

See **Hypersensitivity Pneumonitis**, Table I.  
See **Ovum** and **Fetal Abnormalities**, Table I.

Fibromyositis

A group of common illnesses, non-specific in nature, characterized by pain in the muscles. Also see **Fibrositis**, Table I and **Fibromyositis**, Table I.

Fibromyomas  
Fibrositis

A group of common illnesses, non-specific in nature, characterized by pain, tenderness, and stiffness of joints, muscles, joint capsules and adjacent structures and inflammation of the muscle tissues. See **Fibromyalgia** and **Fibrositis**.

See **Uterine Fibroids**, Table I.

Similar to **Fibromyositis**, Table I with inflammation of the fibrous connective tissue components of muscles, joints, tendons, ligaments, and other "white" connective tissues. Various combinations of **Fibromyalgia**, **Fibrositis** and **Fibromyositis** may occur together as "simple rheumatism," known as **Palindromic** (recurring) **Rheumatism**, Table I. Any fibromuscular tissue may be involved, but the most frequently are low back (**Lumbago**, Table I), neck (**Torticollis**, Table I), shoulders, thorax (**Pleurodynia**, Table I), and thighs (**Leg Aches**, Table I, and "**Charleyhorses**"). **Torticollis** is tonic or intermittent spasm of the neck muscles causing rotation and tilting of the head. **Fibrositis** pains can be brought on or intensified by trauma, exposure to dampness and cold, and by rheumatic problems. A virus or toxemia -- the effect of absorption of bacterial toxins or products formed at a local source of infection -- is felt to be causative sources. Environmental or emotional stresses may play a role. Onset of pain is often sudden, and aggravated by movement. Tenderness may be present, perhaps localized. Muscle spasm may exist. Occasionally considered in retrospect as an early onset for **Rheumatoid Arthritis**, Table I, **Polymyositis**, Table I, **Polymyalgia Rheumatica**, Table I, or other connective tissue diseases. **Fibrositis** may appear spontaneously within a few days or weeks, or may become chronic, or even recur at frequent intervals.

See **Ovarian Cyst**, Table I.

Follicular Cyst  
Food Allergies and Chemical Sensitivities

People can become addicted to most any food, which then constitutes a **Food Allergy**. **Chemical Sensitivities**, however, develop from the body's response to toxins or poisons that are not adequately handled by the person's unique biochemistry. As both **Food Allergies** and **Chemical Sensitivities** can affect biochemistry in similar fashion, the two are often confused and wrongly used interchangeably. The foods that are best liked, and eaten most frequently, tend to be those to which an individual is allergic. The biochemical rules for addiction are the same as those for **Food Allergies**. A person will feel better after having eaten the food to which they are allergic, and then, with withdrawal symptoms, will want to replenish the item that made them feel better. Complete withdrawal can often lead to bizarre phenomena and behavior, as when withdrawing from alcohol or tobacco, or more damaging drugs. There are many different symptoms that can be displayed because of either **Food Allergies** or **Chemical Sensitivities**, as every organ or system in the body can be affected. As the most important shock organ can be the brain, the result can be changes in circulation, localized swelling, increased pressure in the skull, headaches, fatigue, uncontrollable sleepiness, inability to concentrate, memory lapse, incoordination, hallucination, changes in perception from any of the five senses, loss of consciousness and convulsions. Allergic symptoms can mimic exactly the symptoms that have been attributed to nervous breakdown, neurosis or psychosis. **Food Allergies** and **Chemical Sensitivities** can also mimic many other diseases, including **Rheumatoid Diseases**. Also see **Regional Enteritis**, Table I, and **Candidiasis**, Table II.

See **Polymyalgia Rheumatica**, Table I, and **Polyarteritis**, Table I.

See **Celiac Disease**, Table I.

See **Regional Enteritis**, Table I.

See **Regional Enteritis**, Table I.

See **Regional Enteritis**, Table I.

See **Hyperthyroidism**, Table I.

Giant Cell Arteritis  
Gluten Enteropathy  
Granulomatous Colitis  
Granulomatous Ileocolitis  
Granulomatous Ileitis  
Graves' Disease  
Hashimoto's Thyroiditis

Chronic inflammation of the thyroid. Occurs in all groups of people, but particularly in ages 30s or 40s, and more frequently in women. Common complaints are fullness in the throat. The gland is painless, firm, and marked or covered with rounded eminences, as on the surface of a bone or of a tumor. About 1/3 have an under production of thyroid (**Hypothyroidism**, Table I). Lifelong treatment with thyroid hormone is necessary. May be with or without **Hypothyroidism** or **Thyrotoxicosis**, Table I.

Medical data is for informational purposes only. You should always consult your family physician, or one of our referral physicians prior to treatment.

**Hashimoto's Struma**

See **Hashimoto's Thyroiditis**, Table I. (Also similar to **Primary Myxoedema**, Table I; or **Spontaneous Myxoedema** -- without goitre, Table I.)

**Headache**

Headaches are usually common manifestations of acute systemic or intracranial infection, intracranial tumor, head injuries, severe hypertension, lack of oxygen to the brain (cerebral hypoxia) and many diseases of the eye, nose, throat, teeth and ear. The remainder of the headaches result from muscle tension or head pain for which no structural cause can be found. As there is a wide variety of source causations for headaches, stemming from various diseases and bodily parts, only those involving the brain covering, the meninges, **Paget's Disease**, Table I, **Meningomas**, Table I, and **Iritis**, Table I, are reported here. With **Meningeal Irritation**, Table I, or **Acute Meningitis**, Table I, the patient is usually acutely ill, and may be expected to be confused, irrational, excited. The patient may have a stiff neck, or in the sitting posture or when lying with the thigh flexed upon the abdomen the leg cannot be completely extended (Kernig's Sign). Symptoms are recent, severe, generalized headache which is constant, radiates down the neck, with malaise, fever, vomiting. Precedes sore throat or respiratory infection. In **Paget's Disease**, the headache is mild, burning, intermittent or constant, localized or generalized. There is a history of increasing size of skull, and pain in back and limbs. The skull is tender, with evidence of compression of brain and cranial nerves. With **Iritis**, there are changes in appearance of the iris, increased intraocular tension and errors of refraction. The headaches are frontal or supraorbital, moderate or severe pain, frequently worse after use of eyes, and pain in the eyes. In **Meningomas**, there may be visual field changes, aphasia, paralysis and mental changes. The headaches will be mild to severe, localized, generalized, or intermittent. Slow progressive weakness may develop on one side, with convulsions and vomiting. There are also headaches that may accompany an assortment of vascular diseases that should be mentioned here. Also see **Headaches**, Table II.

**Henoch's Purpura**  
**Henoch-Schonlein Purpura**  
**Hepatosplenomegaly**

See **Allergic Purpura**, Table II.

See **Allergic Purpura**, Table II.

**Hepatosplenomegaly** is enlargement of liver and spleen. The liver is the most complex organ in the body, with a remarkable ability to regenerate in response to injury. The liver must detoxify lymphatic drainage from all of the body's cellular wastes. Various disorders in which components of the blood that are abnormal are associated with the spleen, resulting in hemoglobin (anemia), and leukocytes (leukopenia) decrease, and decrease in the number of platelets (thrombocytopenia), or any combination of the foregoing. There are numerous clinical signs, as this condition may be a primary or secondary liver/spleen disease. Diagnostician determines size and hardness or tenderness of liver. See **Splenomegaly**, Table I.

See **Herniated Nucleus Pulposus**. Also see Table III.

**Herniated Disc**  
**Herniated Nucleus Pulposus**

Degenerative changes or trauma may rupture the fibrous ring (annulus fibrosa) of the intervertebral discs. Most commonly this affects the lower back (lumbosacral) and neck (cervical) areas. Symptoms result when the herniated nucleus compresses a nerve root, either within the spinal canal or at the openings where the nerves leave the spinal column (intervertebral foramen). Pain may begin suddenly and severely, or insidiously. It is worse on movement and may be increased by coughing, laughing, straining at stool, etc. Numbness in the sensory impressions (parathesia) may occur. Lower back (lumbosacral herniation) will have pain when straight legs are raised. With herniated cervical discs, neck movements (flexions) are similarly painful. Muscles that are supplied by the impaired nerve eventually become weak, wasted and flaccid and may show spontaneous firing of motor nerves (fasciculation). Cervical cord compression may cause spastic partial paralysis (paraparesis) of the lower limbs and also either urine retention or incontinence from loss of control of a ring-like muscle (sphincter) that controls the flow of urine. When these conditions -- partial paralysis and loss of control of urine -- occur, urgent care and close supervision is required. Compression of a nerve root, thus pain, may also be caused by a spinal tumor, vertebrae tumor or a tumor on the nerve root itself. Bone spurs (osteophytes) may also intrude on the nerve openings, or the inappropriate movement of one vertebra upon another (subluxation):

**Spondylolisthesis** may create similar pain. See **Spondylolisthesis**, Table III.

See **Lymphoma**, Table I.

**Hodgkiin's Disease**  
**Hyperchromic Deficiency of Pregnancy**  
**Infancy and Childhood**  
**Hyperchromic Microcytic Anemia**  
**Hyperplasia**  
**Hypersensitivity Angiitis**  
**Hyperthyroidism**

See **Anemia, Pernicious**, Table I.

See **Anemia, Pernicious**, Table I.

See **Splenomegaly**, Table I.

See **Polyarteritis**, Table I.

A condition characterized by the abnormal multiplication or increase in the number of normal cells in normal arrangement in the tissue (hyperplasia), creating excessive secretion of its hormones, and increased metabolic rate. The disease is characterized by nervousness, weakness, heat sensitivity, sweating, restless overactivity, weight loss (usually with increased appetite), tremor, palpitation, stare, and lid lag. Abnormal protrusion of the eyeball (exophthalmos) may

Medical data is for informational purposes only. You should always consult your family physician, or one of our referral physicians prior to treatment.

be prominent. An overactive heart may be enlarged, and accompanied by high pulse pressure (tachycardia), hypertension, and high heart rate is the rule. Older persons may have an apathetic form with heart failure, general ill health and malnutrition (cachexia), muscle atrophy, or diarrhea. The thyroid is usually enlarged two to three times, and sound or murmur (bruit) may be heard on listening. There may be reddish nodules on the anterior of the legs (pretibial **Myxedema**, Table I) and occasionally clubbing of the fingers (thyroid acropachy).

**Hypersensitivity Pneumonitis**

A lung disease caused by an allergic response to one of a variety of agents. Extrinsic agents that can be the source of inflammation are often from moldy hay (*Micropolyspora faerni* or *Thermoactinomyces vulgaris*); parakeets, pigeons and hens (serum protein and droppings); sugar cane waste (*Micropolyspora faerni* or *Thermoactinomyces vulgaris*); mushroom post-spawning compost (*Micropolyspora faerni* or *Thermoactinomyces vulgaris*); moldy cork dust; infected maple bark (*Cryptostroma corticale*); moldy barley, malt (*Aspergillus fumigatus* or *Aspergillus clavatus*); moldy sawdust from redwoods (*Pullularia pullulans* or *Graphium* species); moldy cheese (*Penicillium* species); infested wheat flour (*Sitophilus granarius*); bovine and porcine serum protein and pituitary antigens; fish meal; coffee bean dust; humidifiers and air conditioners (*Micropolyspora faerni* or *Thermoactinomyces vulgaris*); animal pelts, hair or dander; straw and reeds used in roofing. Precipitating antibodies to these and other (intrinsic) foreign antigens suggest an immune-complex-mediated (Type III) reaction, as with **Systemic Lupus Erythematosus**, Table I. Type IV reactions are cell-mediated or delayed reactions, as with an infectious disease such as tuberculosis resulting in the release of substances (lymphokines) which affect cells and lead to tissue damage by sensitized lymphocytes following contact with antigens. (There are also Type I and Type II reactions which are not discussed here.) In acute disease, episodes of fever, chills, cough and difficult or labored breathing (dyspnea) occur to a previously sensitized individual. This typically occurs 4 to 8 hours after reexposure to the antigen. Loss of appetite (anorexia), nausea and vomiting may also be present. Abnormal respiratory sounds may be heard, but wheezing is unusual. In the chronic form of the disease, progressive exertional labored breathing, productive cough, fatigue, and weight loss may occur.

**Hypopituitarism (Adult)**

**Hypopituitarism** in the adult may result from space-occupying infiltrative lesions, or from coagulated dead tissue (infarction) of the pituitary usually associated with childbirth hemorrhage or shock (Sheehan's syndrome) Lesions may also be associated with hypothalamus, and from other sources. The degree of deficiency depends on the nature of the underlying pathologic process and the stage in the historical progression of the disease. The function of all target glands will decrease when all hormones are deficient (**Panhypopituitarism**, Table I). Thyroid Stimulating Hormone (TSH) deficiency leads to **Hypothyroidism**, Table I; Adrenocorticotropic Hormone Corticotropin (ACTH) deficiency leads to hypofunction of the adrenal cortex with corresponding hypotension and intolerance to stress and infection. Lack of Follicle Stimulating Hormone (FSH) and Lutenizing Hormone (LH) in the female leads to infertility, absent or abnormal menses (amenorrhea) and decreased secondary sexual characteristics. Lack of Follicle Stimulating Hormone (FSH) and Lutenizing Hormone (LH) in the male leads to testicular atrophy, decreased sperm (spermatogenesis) with consequent infertility, and a decrease in secondary sexual characteristics. Deficiency in Human Growth Hormone (HGH), perhaps in conjunction with lack of cortisol, may lead to hypoglycemia. Human Growth Hormone (HGH) also influences the growth of collagen tissue.

See **Hashimoto's Thyroiditis**, Table I.

See **Regional Enteritis**, Table I.

See **Regional Enteritis**, Table I.

See **Uveitis**.

See **Uveitis**, Table I. Also see **Headache**, Table I and Table II.

See **Regional Enteritis**, Table I.

**Hypothyroidism**

**Heilitis**

**Heocolitis**

**Iridocyclitis**

**Iritis**

**Jejuonoileitis**

**Juvenile Arthritis (Still's Disease)**

Uncommon before six months of age; common at ages 1-3; can occur any time, especially about time of menopause in women. Tends to affect larger joints, resulting in interference with growth and development. Unusual or undue smallness of the lower jaw (micrognathia), due to impaired growth of the mandible. Rash, fever, inflammation of eye (**Iritis**, Table I), enlargement of spleen (**Splenomegaly**, Table I), and generalized disease of the lymph glands (lymphadenopathy) are frequently present. Rheumatoid Factor (RF) -- a non-specific blood test found in many diseases -- is usually absent. Complete remissions occur in 75 to 80 % of patients. Also see **Splenomegaly**, Table I. See **Rheumatoid Arthritis**, Table I.

Thigh pain. See **Fibrositis**, Table I.

See **Splenomegaly**.

See **Amyotrophic Lateral Sclerosis**, Table I.

Low back pain. See **Fibrositis**, Table I.

See **Systemic Lupus Erythematosus**, Table I.

**Leg Aches and "Charleyhorse"**

**Leukopenia**

**Lou Gherig's Disease**

**Lumbago**

**Lupus**

**Lymphoma**

A **Lymphoma** is a tumor (neoplasm) arising in the reticuloendothelial and lymphatic system. Two major types are **Hodgkiin's Disease**, Table I and **Non-Hodgkin's Disease**, Table I.

Medical data is for informational purposes only. You should always consult your family physician, or one of our referral physicians prior to treatment.

Rarer forms include **Burkitt's Lymphoma**, Table I, and, even rarer, **Mycosis Fungoides**, Table I. Annually there are 5 to 6 thousand new cases of **Hodgkin's Disease** diagnosed in the U.S. The male-to-female ratio is 1.4 to 1. It is rare among children under 10 years of age, and occurs with equal frequency among young and old adults. **Hodgkin's Disease** resembles a low-grade graft-versus-host reaction. A number of infectious agents, including viruses, have been postulated as a cause, but an infectious origin is unproved. The rate of progress varies greatly from relatively slow to an aggressive process. Intense itching (pruritus) may occur early. Lymph Node Enlargement, fever, night sweats and weight loss occur frequently. Internal lymph nodes (retroperitoneal), liver (viscera) or bone marrow are involved. Occasionally there are a few days of high fever regularly alternating with a few days to several weeks of normal or subnormal temperature. There is immediate pain after drinking alcoholic beverages. Bone involvement may produce pain, diminution of bone density (rarefaction), vertebral compression, and, rarely, fracture. Other complications can arise from nerve compression, bile duct obstruction, Cryptococcosis of the Central Nervous System, Herpes Zoster infection, tuberculosis and others. In **Non-Hodgkin's Disease**, there is a close relationship to lymphocytic leukemias, in that up to half of children and about 20% of adults develop a leukemia-like set of symptoms. **Non-Hodgkin's Lymphoma** occurs more frequently than **Hodgkin's Disease**. Each year 7 to 8 thousand new cases are diagnosed in the U.S. It occurs in all age groups, but the incidence increases with age. The cause is unknown, although there is substantial experimental evidence for a viral source. Lymph nodes are rubbery and discrete and later become matted. The tonsils are a common site. Lymph swelling may cause pressure symptoms on various organs. Gastric involvement can simulate gastrointestinal carcinoma, and intestinal lymphoma may cause a malabsorption syndrome. The skin and bones are initially involved in 15% of patients with a condition that breaks down the tissues (histiocytic lymphoma) and 7% of patients with a condition that involve lymphocytes (lymphocytic lymphoma). Anemia is present initially in about half of the patients and eventually develops in most. **Burkitt's Lymphoma**, Table I, involves lymphocyte producing cells, and has a geographic distribution which is rare in the U.S., appears to be determined by climatic factors suggesting an insect vector, and is found in Central Africa. There is strong evidence that the herpeslike Epstein-Barr virus may be the cause. **Mycosis Fungoides**, Table I, is an uncommon chronic lymphoma that primarily affects the skin but occasionally involves internal organs. The disease is rare and is insidious in onset. It may appear as a chronic, severely itching intermittent rash that cannot be diagnosed for a long time. Initially plaque-like, it gradually spreads to involve most of the body, becomes more extensive and nodular, and eventually disseminates. Lesions may become ulcerated. Most patients are over 40 by the time the disease is diagnosed, and from then to death is about 7 to 10 years. Also see **Splenomegaly**, Table I.

See **Ankylosing Spondylitis**, Table I

See **Takayasu's Disease**, Table I.

See **Headache**, Table I and Table II.

See **Headache**, Table I and Table II.

See **Sjogren's Syndrome**, Table I

See **Muscular Atrophies**, Table I

**Marie-Strumpell Disease**

**Martorell's Disease**

**Meningeal Irritation**

**Meingomas**

**Mikulicz's disease**

**Motor Neuron Disease**

**Multiple Sclerosis**

A slowly progressive Central Nervous System (CNS) disease characterized by disseminated patches of missing nerve tissue fatty (lipid) sheath (demyelination) in the brain and spinal cord, resulting in multiple and varied neurologic symptoms and signs, usually with remissions and exacerbations. There is a suggestion of genetic susceptibility. Women are affected somewhat more often than men. The disease is more common in temperate climates than in tropics, but relocation after 15 does not alter risk. Onset is usually insidious. In most cases, patients present between age 20 and 40 with one or more symptoms, their nature depending upon the site of missing nerve sheath. Most early common symptoms are: An abnormal or missing sensation (paresthesias) in one or more extremities, the trunk, or on one side of the face; weakness or clumsiness of a leg or a hand; visual disturbances, such as partial blindness and pain in one eye (retrobulbar optic neuritis), seeing double (diplopia), dimness of vision or partially blind area (scotoma). Other common early symptoms are a fleeting ocular palsy, transient weakness, slight stiffness or unusual fatigability of a limb, minor gait disturbances, difficulties with bladder control, vertigo, or mild emotional disturbances. These often occur months or years before the disease is recognized. There are numerous other mental, cranial nerve, motor, sensory, and autonomic symptoms, depending upon the nerves affected. The course of the disease is highly varied and unpredictable. It often remits, and at first, months or years of remission may separate episodes, but then the intervals will grow shorter until eventually permanent and progressive disablement occurs. Life span is probably not shortened. Average duration of illness probably exceeds 25 years, but there is great variability. Some remissions have lasted longer than 25 years, while other patients are incapacitated rapidly. The course is progressively and unremittingly downhill, and occasionally fatal within a year.

**Muscular Atrophies**

Muscular Atrophies is a disease characterized by progressive degeneration of Central Nervous System (CNS) cells, certain brain cells, and certain nerve cells that carry signals away from the cells related to the brain and CNS (bulbar efferent neurons). Symptoms vary considerably

Medical data is for informational purposes only. You should always consult your family physician, or one of our referral physicians prior to treatment.

**Myalgia**  
**Mycosis Fungoides**  
**Myocardia**

according to the part of the nervous system most affected. May involve muscular weakness as presented in hands, face, and legs. Muscular Atrophies also involved with chewing, swallowing and talking, and can affect sensory signals.

See **Fibromyositis**, Table I.  
See **Lymphoma**, Table I.

**Myocardial Infarction**  
**Myositis**  
**Myxedema**  
**Necrotizing Angitis**  
**Neurotic Illness**

Noninflammatory heart disease; heart deficiency. **Myocardial Disease**, Table I, may include inflammation of the muscles of the heart (**Myocarditis**), and noninflammatory muscle disease (**Cardiomyopathy**). The patient may complain of chest pain, sometimes spasmodic, suffocating attacks (angina), or hard breathing on light exercise (dyspnea). Also see **Dysrhythmias**, Table I, **Myocardial Disease**, Table I, **Pericardial Disease**, Table I, and **Rheumatoid Fever**, Table II.

See **Pericardial Disease**, Table I.  
See **Fibromyositis**, Table I.

Thyroid deficiency caused by radioiodine therapy, surgery, or primary atrophy of the thyroid. See **Polyarteritis**, Table I.

**Neurotic Illness** are disorders in which psychologic and associated physiologic responses to ordinary stress present in exaggerated form. Neuroses differ from normal conduct mainly in quantitative, rather than qualitative form. Contact with reality is undisturbed, and neurotic patients retain insight into the morbid character of their impulses and actions. There is a relationship between a Neurosis and the stress that preceded it. A severe obsessional or phobic state may be precipitated by bad news but is rarely relieved if the information proves to have been erroneous. Organic disease and Psychosis may initially present with neurotic features. Neurotic patients usually have a history of difficulty in adapting and also have emotional disturbances, but they do not usually encroach upon the individual's everyday life. Childhood Neurotic symptoms usually present as a cluster of symptoms including nightmares, temper tantrums, minor phobias, extreme shyness and speech difficulties. They may have difficulty in relating to other children or authoritative figures in school, as well as later problems in sexual adaptation such as dysfunction of arousal and orgasm or sexual deviation.

See **Lymphoma**, Table I.  
See **Lymphoma**, Table I.  
See **Celiac Disease**, Table I.  
See **Psychotic** and **Neurotic Illness**, Table I.  
See **Hypersensitivity Pneuonitis**, Table I.

**Non-Hodgkin's Disease**  
**Non-Hodgkin's Lymphoma**  
**Nontropical Sprue**  
**Organic Brain Syndromes**  
**Organic Dust Pneuonconiosis**  
**Osteitis Deformans**

A slowly progressive bone disorder characterized by an initial loss of bone calcium (osteolysis) usually followed by bone growth (osteoblastic) phase. This results in abnormal skin structural patterns and gross deformity. About 3% of people over 40 have **Paget's Disease (Osteitis Deformans)**, and the incidence increases to about 10% of those over 80s, although more men are affected than women. The disease appears to be more common in parts of Europe, England, Australia and New Zealand, and is rare in Scandinavia, Africa, Japan, India and South America. Onset is frequently insidious, often showing up during routine blood chemistry studies that show an elevated alkaline phosphatase, or when X-rays are obtained for other reasons. Although any bone can be involved, the most commonly affected bones, in order, are the pelvis, femur, skull, tibia, vertebrae, clavicle and humerus. The course is slowly progressive. Deformities may develop from bowing of the bones or involvement of adjacent joints. Pathologic fractures of the femur or tibia may occur. Spinal cord compression occurs in patients with lumbar spine involvement. There may also be severe pelvic disease, with extrusion of the acetabular bone. The acetabulum is the cup-shaped cavity where the femur bone articulates. See **Headache**, Table I and Table II.

See **Ovarian Cysts**, Table I.

**Ovarian Cancer**  
**Ovarian Cysts**

Ovaries can develop various kinds of cysts of which 75 to 85% are benign and don't require surgery. A sign of a **Follicular Cyst**, Table I, can be a sudden onset of pain on one side of the abdomen lasting a few hours and occurring halfway between monthly periods. A sign of the **Corpus Luteum Cyst**, Table I, can be abnormal or slight bleeding. There is no good screening tool for **Ovarian Cancer**, Table I, although symptoms can be bleeding and abdominal discomfort.

**Ovum and Fetal Abnormalities**

Congenital abnormalities may be isolated or multiple, inherited or sporadic, apparent or hidden, gross or microscopic. They cause about 10% of neonatal deaths. A major anomaly is apparent at birth in 3 to 4% of newborns. By age 5 years of age, up to 7.5% of all children manifest a congenital defect. Of the many defects that may start from the ovum, it is unknown how many have been affected by "auto-immune" disorders. Death prior to birth, at birth, and deformities after birth, such as dwarfism, may all reflect such disorders.

See **Osteitis Deformans**, Table I. Also see **Headache**, Table I and Table II.  
See **Fibromyositis**, Table I.

**Paget's Disease**  
**Palindromic (Recurring) Rheumatism**  
**Pancreatitis**

Medical data is for informational purposes only. You should always consult your family physician, or one of our referral physicians prior to treatment.

**Pancreatitis** is inflammation of the pancreas. Bile tract (biliary) disease is the usual underlying cause in about 50% of patients. Attacks can be related to the passage of gallstones into the duodenum. Trauma or local deficiency of blood (ischemia), after surgery, may precipitate the inflammation. Severe abdominal pain is the outstanding symptom. Usually generalized or in the upper quadrants and often radiating to the back, it steadily increases, reaches a maximum in a few minutes or hours and then usually remains severe and steady, occasionally colicky, until it diminishes gradually over days or weeks as the inflammation subsides. Movement and sometimes respiration aggravate the pain; sitting up or flexion at the waist relieves it. Nausea and vomiting are common. Fever of 38° to 39° C (100° to 102° F) develops during the first few days. Shock may occur in severe attacks; the blood pressure is reduced, the pulse rate elevated, and the skin clammy. Abdominal guarding and rigidity are present in only 30% of patients and rebound tenderness in 15%. Diminished or absent bowel sounds and abdominal distention occur in 15% of patients. Common bile duct stones, or compression of the common bile duct by the swollen and inflamed pancreas may cause jaundice which diminishes as the inflammation subsides. A faint discoloration of skin (ecchymoses) may be observed in the flanks or about the umbilicus. There may be massive upper Gastrointestinal (GI) bleeding, cardiovascular shock, hypocalcemia or other signs. Pain persisting for more than 5 days along with chills, fever, and an elevated White Blood Count (WBC) suggests further complications.

See **Hypopituitarism**, Table I.

See **Parkinsonism**, Table I.

See **Parkinsonism**, Table I.

**Panhypopituitarism**  
**Paralysis Agitans**  
**Parkinsons Disease**  
**Parkinsonism**

A chronic Central Nervous System disorder (CNS) characterized by slowness and poverty of purposeful movement, muscular rigidity, and tremor. Occurs in the middle-aged and elderly. It slowly progresses, and may not incapacitate for years. Onset is insidious, often beginning with tremors in one hand followed by increasing sluggishness of physical and mental responses (bradykinesia), and rigidity. Full-blown, facial expression becomes fixed, with smooth muscles and almost immobile; eyes are unblinking, staring, and the mouth is slightly open and, often, drooling from corners. Facial skin is often greasy. **Paterson-Kelly Syndrome**

See **Esophageal Webs**, Table I.

See **Salpingitis**, Table I.

See **Polyarteritis**, Table I.

**Pelvic Inflammatory Disease (PID)**  
**Periarthritis Nodosa**  
**Pericardial Disease**

The membranous sac surrounding the heart, the pericardium, may be involved with inflammation, trauma, or neoplasms. Inflammation may be from bacterial, viral, or fungal infection, or may stem from a systemic disease, such as **Rheumatoid Arthritis**, Table I, **Systemic Lupus Erythematosus**, Table I, **Uremia**, Table II, or Acute Myocardial Infarction, Table I. It may occur without an identifiable cause (idiopathic or benign) (**Pericarditis**, Table I), after surgery (pericardiotomy) or as a consequence of coagulation of dead tissue resulting from obstruction of circulation (**Myocardial Infarction**, Table I). Wounds that penetrate the chest or due to the swallowing of foreign bodies may rupture the Pericardium. Cancerous tumors (**Carcinomas**, Table I, **Sarcomas**, Table I and **Lymphomas**, Table I) may also create bleeding (hemorrhagic effusion) into the pericardium. **Pericarditis** is characterized by localized or widespread light or heavy deposits of a whitish, insoluble protein formed by the action of materials that form blood clots (fibrinogen). It may result from infection, trauma, bleeding or may accompany **Collagen Tissue Disease**, Table I. It may begin abruptly or insidiously, and is preceded by dull or sharp pain over the heart or stomach (epigastrium and lower part of thorax) or chest (substernal) pain radiating to the neck, trapezius, or shoulders. Pain may vary from mild to severe and may also be aggravated by thoracic motion, cough and respiration (pleuropericarditis). It is relieved by sitting up and leaning forward. Non-painful (indolent) **Pericarditis**, Table I may result from tuberculosis or **Uremia**, Table I. Excessive respiration (tachypnea) and a cough may be present, with fever, chills, weakness and anxiety. An unusual pulse (pulsus paradoxus) may be present. Also see **Dysrhythmias**, Table I, **Myocardial Disease**, Table I, and **Rheumatoid Fever**, Table II.

**Arthritis** that is situated in joints.

See **Sarcoidosis**, Table I.

See **Carpal Tunnel Syndrome**, Table I.

See **Ulcerative Colitis**, Table II.

Thorax pain. See **Fibrositis**, Table I.

See **Hyperthyroidism**, Table I.

See **Esophageal Webs**, Table I.

Death of liver cells.

**Peripheral Arthritis**  
**Peripheral Lymphadenopathy**  
**Peripheral Neuropathy**  
**Peritonitis**  
**Pleurodynia**  
**Plummer's Disease**  
**Plummer-Vinson Syndrome**  
**Post-necrotic Cirrhosis of the Liver**  
**Polyarteritis**

Characterized by inflammation of small and medium arteries having segmented dying cells (necrosis), with secondary deficiency in blood supply normally supplied by the affected blood vessels. Probably has a multiple pathogenic origin. Inflammation of the kidneys (glomerulonephritis) is frequently present. Various drugs, vaccines, bacterial and viral infections have been associated with the onset of this disease. Onset is usually between ages 25 and 50, but has been reported in patients aged 1 month to 78 years of age. The disease is three times more common

Medical data is for informational purposes only. You should always consult your family physician, or one of our referral physicians prior to treatment.

in men than in women. Many other diseases may be mimicked, and its course may be that of an acute illness or subacute, with fatal termination after several months. Or, it may be insidious and present as a chronic wasting disease. Symptoms are determined largely by the location and severity of the arteritis, and by the extent of secondary circulation impairment, and may affect virtually any organ system, or combination thereof. The most common initial symptoms include fever, abdominal pain, weakness, weight loss, related peripheral neuropathy, asthma, hypertension, swelling (edema), urination at long intervals (oliguria), the presence of urinary constituents in the blood (uremia), widespread or localized abdominal pain, nausea, vomiting, and bloody diarrhea. Acute cellular death (ischemia) may occur in the intestines leading to perforation of the membrane that lines the abdominal wall (secondary peritonitis). Affecting the central nervous system, symptoms will be headaches, convulsions and psychosis. Muscle (myalgias) and joint (arthralgias) inflammation is common. (Also see **Hypersensitivity Angiitis**, Table I, **Necrotizing Angiitis**, Table I, **Wegener's Granulomatosis**, Table I, **Takayasu's (pulseless) Disease**, Table I, **Cogan's Syndrome**, Table I, and **Giant Cell Arteritis**, Table I.

**Polyarteritis Nodosa**

**Polyarthritits**

**Polyarthralgia**

**Polycythaemia** (with achlorhydria)

See **Polyarteritis**, Table I.

Inflammation of a number of joints.

Inflammation of a number of joints.

A chronic, life-shortening proliferation of certain bone marrow cells characterized by an increase in red blood cell (RBC) mass (erythrocytosis) and by hemoglobin concentration. Average onset age is 60 years, but may occur under 40. Males more frequently affected than females, and the disease is more common among Jews. Presents as fatigability, decreased efficiency, difficulty in concentration, headache, drowsiness, forgetfulness, and vertigo. Intense itching (pruritus) may occur after a bath. Retinalveins may be dark red, full, and tortuous. Spleen is usually perceptible by touch (palpable). Also see **Splenomegaly**, Table I.

See **Polycythaemia** (with achlorhydria), Table I.

**Polycythemia Vera**

**Polymyalgia Rheumatica**

Chronic generalized inflammatory condition of the large arteries, principally in the temple (temporal) and back part of head (occipital) arteries. Occurs mostly in those over 60 years of age, and rises with age. Onset may be acute or gradual and may appear to be an infection such as an influenza-like attack, with low-grade fever, malaise, anorexia, and weight loss. **Polymyalgia Rheumatica** is characterized by aching and stiffness involving mainly the trunk and muscle groups nearest to the center of the body (proximal). Usually a characteristic headache is severe, throbbing pain in the temple with redness, swelling, tenderness, and nodulation of the temporal artery, whose pulsations may be strong, weak, or absent. Serious complications include blindness, stroke, coronary closure (occlusion), and arterial insufficiency of the upper and lower extremities. About one-half of the patients have eye (ocular) symptoms and 40% have visual loss.

**Polymyositis**

Systemic connective tissue disease characterized by inflammatory and degenerative changes in the muscles (**Polymyositis**) and frequently also in the skin (**Dermatomyositis**, Table I), which leads to symmetric weakness and some muscle atrophy, usually of the limbs, and, often, to a skin rash. This condition can occur in the muscles alone, or in the skin, or in combinations. In children, in either form, it can be associated with considerable inflammation of the bowel vessels (vasculitis). This is not a rare disease condition. The onset may be acute or insidious. An acute infection may occur first, and then incite the first symptoms of inflammation of the muscles (**Myositis**, Table I) which include fever, prostration, central muscle weakness, some times painful muscles, always diminished strength, weight loss, and, frequently joint pain (**Arthralgias**, Table I). Symptoms may vary greatly from person to person. Muscle weakness can appear suddenly and may progress over weeks or months. There may be difficulty in raising the arms above shoulders, climbing steps, or arising from a sitting position, or even difficulty in raising the head from the pillow. Patients tend to fall and find it hard to arise without assistance. Many may become wheelchair bound or bed-ridden. Swallowing may become difficult. Limb contractures may develop late in the chronic stages. Symptoms of **Systemic Lupus Erythematosus**, Table I, may appear on the skin, and there may be many other symptoms involving other parts of the body. **Sjogren's Syndrome**, Table I occurs with a few patients.. The esophagus, large and small bowel, lungs, heart, kidney, spleen and skin (with ulcers), and other bodily structures can be affected. **Carcinoma**, Table I, normally occurs in 20% of the adults. Prognosis is better with children than in adults, but is critical in those associated with the malignancy. Death in adults follows severe and progressive muscle weakness, difficulty in swallowing (dysphagia), malnutrition, aspiration pneumonia, or respiratory failure with superimposed pulmonary infection. Death in children is usually due to inflammation of the bowel vessels. Also see **Splenomegaly**, Table I.

**Primary Myxoedema**

**Primary Systemic Sclerosis**

**Progressive Bulbar Palsy**

**Progressive Systemic Sclerosis**

**Progressive Spinal Muscular**

**Prolapsed Intervetebral Disc**

See **Hashimoto's Thyroiditis**, Table I. (Also **Spontaneous Myxoedema**, Table I.)

See **Scleroderma**, Table I.

See **Muscular Atrophies**, Table I.

See **Scleroderma**, Table I.

See **Muscular Atrophies**, Table I.

See **Herniated Nucleus Pulposus**, Table I.

Medical data is for informational purposes only. You should always consult your family physician, or one of our referral physicians prior to treatment.

**Proptosis**

See **Exphthalmos**, Table I.

**Primary Myxoedema**

See **Hashimoto's Thyroiditis**, Table I.

**Psoriasis**

There are many appearances of **Psoriasis**, a skin disease characterized by the formation of scaly red patches on the skin over the muscles that perform extension (extensor muscles). The condition may be ring-shaped (annularis), associated with chronic arthritis (arthropathica), marked by white, thickened patches in mucous membrane of cheeks, gums and tongue (buccalis), coalescence of large contiguous lesions suffered by bakers, grocers', bricklayers itch, and so on (diffusa), occurring in solid patches (discoides) lesions in curved linear patterns (figurata), small, scaly lesions located at openings of sebaceous and sweat glands (follicularis), occur in small, distinct, irregular patches (guttata), have serpentine arrangement (gyrata), be associated with confluent lesions and thickening and hardening skin (inveterata), in circular patches resembling coins (nummularis), in old, thick, tough patches covered with scales resembling outside of oyster shells (osteacea), a syphilitic symptom on palms or soles (palmaris et plantaris), lesions that consist of minute, red, pinhead-shaped papules, often surmounted with pearly scales (punctata), lesions covered with pustules (pustular punctata), skin eruptions from syphilis (rupiodes), or lesions over the whole body (universalis). Onset is gradual, with chronic remissions and recurrences which vary in frequency and duration. Factors which precipitate psoriatic eruptions include local trauma and, occasionally, severe sunburn, irritation, topical medications, withdrawal of systemic corticosteroids, and long-term chloroquine antimalarial therapy. Characteristically involves the scalp, back and buttocks. The nails, eyebrows and other body parts may be affected. Lesions heal without scarring, and hair growth is not altered. Nail involvement may resemble a fungus infection.

**Psoriatic Arthritis**

Often resembles **Rheumatoid Arthritis**, Table I. Also see **Psoriasis**, Table I.

**Psychotic Illness**

**Psychotic illness** is usually defined as dementia praecox and manic-depressive states. Manic-depression is a benign feeling or mental state chiefly marked by emotional instability, striking mood swings, and a tendency to recurrence. Dementia praecox is a term for a large group of psychoses of psychogenic or biochemical origin, often recognized during or shortly after adolescence but not infrequently in later maturity. The chief characteristics are disorientation, loss of contact with reality, and splitting of the personality (schizophrenia). The dementia praecox types include paranoia and other forms such as hebephrenia and catatonia. Drugs, cerebral tumors, temporal lobe epilepsy, **Multiple Sclerosis**, Table I, vitamin B<sub>12</sub> deficiency, head injury, and fat embolism are the most common organic causes of psychosis. Paranoid schizophrenia is the most common psychotic syndrome appearing in cerebral diseases. Schizophrenic states due to excessive consumption of amphetamines, alcohol, or less often bromides are frequently misdiagnosed as primary schizophrenic illnesses. Paralysis (paresis) mimics psychosis. Depressive states often follow influenza, typhoid, infectious hepatitis, or childbirth or may be associated with medications such as antihypertensive drugs. Senile dementia is due to a degenerative process with a large loss of cells from the cerebral cortex and other brain areas. The brain shows marked atrophy. Senile plaques and neurofibrillary tangles are present. See **Amyloidosis**, Table I. The condition is more common in women and appears usually in the 8th decade or later. Dementia usually progresses steadily, becoming well advanced after 2 to 3 years.

**Psychotic Senility**

See **Psychotic Illness**, Table I.

**Pulseless Disease**

See **Takayasu's Disease**, Table I.

**Pyoderma Gangrenosum**

See **Ulcerative Colitis**, Section II.

**Raynaud's phenomenon**

A condition caused by an abnormal degree of spasm of the blood vessels of the extremities, especially in response to cold temperature and which would not affect a normal person. Emotional stress may cause the symptoms, while heat relieves the symptoms. Rare in males.

**Regional Enteritis**

Small particle tissues (granulomatous) -- tumors or neoplasms -- create nonspecific inflammatory diseases usually affecting the lower ileum but often involving the colon and occasionally other parts of the gastro-intestinal (GI) tract. This disease occurs equally among men and women, most cases beginning before age of 40, with a peak incidence in the 20s. The tiny tumors or neoplasms (granulomas) seem to derive from the lymph nodes and intestinal tissue, suggesting that a transmissible agent might be responsible for the characteristic cellular lesions. The inflammatory process involves all layers of the intestinal wall, which becomes greatly thickened. Changes are quite marked in the submucosa with cell thickening, lymphocytic infiltration and extensive fibrosis occurring. Patchy ulceration develops on the mucosa, with mucosal swelling (edema) and ulcers, creating a "cobblestone" appearance. Similar characteristics occur to adjacent tissues with enlargement of certain lymph nodes. Inflammation, deep ulceration, swelling (edema), and creation of fibrous tissue (fibrosis) are responsible for obstruction, and deep hollows (sinus tracts) ulceration, and abscesses which are the major local complications. Segments of diseased bowel are characteristically sharply demarcated from adjacent normal bowel, prompting this **Enteritis** to be given the name of "**Regional**." Many segmented lesions may be separated by normal areas. Inflammation of the ileum alone (**Ileitis**, Table I) is involved with 50% of the cases. Both Ileum and colon (**Ileocolitis**, Table I) occur in about 40%

Medical data is for informational purposes only. You should always consult your family physician, or one of our referral physicians prior to treatment.

of the cases. The Colon alone (**Granulomatous Colitis**, Table I) is involved with less than 10% of the cases. Occasionally the entire small bowel (**Jejunioileitis**, Table I) is involved, and rarely also the Stomach or Duodenum. Chronic diarrhea associated with abdominal pain, fever, loss of appetite (anorexia), and an increase in abdominal mass are the most common features. Many patients are first seen with an "acute abdomen" which seems to resemble acute appendicitis or intestinal obstruction, each of which must be ruled out. Intestinal bleeding, perforation and small bowel-cancer develop rarely. Manifestations outside of the intestine are: (1) acute immunologic or microbiologic concomitants of bowel inflammation, which include **Peripheral Arthritis**, Table I, **Episcleritis**, Table I, **Aphthous Stomatitis**, Table I, (**Thrush/Candidiasis**: white spots and inflammation in the mouth), **Erythema Nodosum**, Table I, and **Pyoderma Grangrenosum**, Table I. Those running an independent course are: **Ankylosing Spondylitis**, Table I, **Sacroilitis**, and deep **Uveitis**, Table I. The usual is a series of attacks of bloody diarrhea which varies in intensity and duration. Onset may be acute and violent, with diarrhea, high fever, signs of inflammation of the membrane which lines the abdominal wall (peritonitis) and extreme chemical poisons (toxemia). Most attacks begin insidiously, with an increased urgency to defecate, mild lower abdominal cramps, and the appearance of blood and mucus in the stools. The feces may be normal or hard and dry, but rectal discharges of mucus may be loaded with Red Blood Cells (RBC) and White Blood Cells (WBC). There may be 10 to 20 bowel movements per day, often with severe cramps with no rest at night. Stools may also be watery and contain pus, blood and mucus, and frequently may consist almost entirely of blood and pus. Malaise, fever, anemia, loss of appetite (anorexia), weight loss, an increase in the number of leukocytes in the blood (leukocytosis), below normal albumin (hypoalbuminemia), and elevated erythrocyte sedimentation rate (ESR) accompany active **Ulcerative Colitis**, Table I. A rapidly, progressive initial attack may be fatal in 10%. Complete recovery may occur in another 10%. In most cases the disease is chronic with repeated exacerbations and remissions. Colon cancer may be increased due to several factors.

See **Takayasu's Disease**, Table I.

See **Fibromyositis**, Table I.

**Reversed Coarctation**  
**Rheumatism**  
**Rheumatoid Arthritis**

**Rheumatoid Arthritis** is probably initiated by multiple factors; One percent of the population is affected, women 2 to 3 times more commonly than men. **Rheumatoid Arthritis** is a chronic syndrome characterized by nonspecific, usually symmetric inflammation of the tissues surrounding the joints (peripheral), potentially resulting in progressive destruction of the joints (articular) and surrounding tissues (periarticular) structures. Other generalized manifestations may also be present. Onset may occur at any age, but usually occurs between 35 and 45. Diagnostic criteria requires a number of characteristic observations, such as pain and morning stiffness. On use of the joints, there is tenderness in at least 1 joint, swelling in at least 1 joint, symmetric joint swelling, subcutaneous nodules over bony prominences, and other related clinical factors. Usually identified by use of a clinical assessment check-list and blood tests, as well as other factors. No single definitive test known. Also see **Trigeminal Neuralgia**, Table I. See **Juvenile Arthritis**, Table I.

See Section II.

See **Rheumatic Fever**, Table II.

See **Herniated Nucleus Pulposus**. Also see Table III.

See **Ulcerative Colitis**, Table II.

**Rheumatic Fever**  
**Rheumatoid Heart Disease**  
**Ruptured Disc**  
**Sacroilitis**  
**Sarcoidosis**

**Sarcoidosis** is a multisystem condition of skin and mucous membranes (epithelium) consisting of nodules (tubercles) that involve various organs or tissues, with symptoms that depend on the site and degree of involvement. **Sarcoidosis**, Table I, occurs predominantly between ages 20 and 40 and is most common among northern Europeans and American Negroes. The incidence in some developed countries exceeds that of tuberculosis. Symptoms may be absent, slight, or severe and depend on the site of involvement. Loss of function of specific organs may be due to the active granulated tissue (granulomas) or to development of secondary fibers (fibrosis). Fever, weight loss, and **Arthralgias**, Table I, may be initial manifestations. Persistent fever is usually accompanied with liver (hepatic) involvement. A disease of the lymph glands (**Peripheral Lymphadenopathy**, Table I) may be involved. The lungs (pulmonary infiltration) may be involved. Skin lesions (plaques, papules, and subcutaneous nodules) are frequently present in severe **Sarcoidosis**. A redness of skin, with nodules (**Erythema Nodosum**, Table I), with fever and **Arthralgias** is common in Europe, but not the United States. Liver granules (hepatic granulomas) are found in 70% of the patients. Enlargement of the liver (hepatomegaly) is noted in less than 20% of patients. The **Uveitis**, Table I, (granulomatous uveitis) affects in 15% of the cases, along with loss of vision from secondary glaucoma, if untreated. The heart may be involved, with angina, congestive failure, or fatal abnormalities (conduction). Acute **Pol-yarthriti**s, Table I, with swelling and tenderness, may be prominent. The Central Nervous System (CNS) may be affected in many ways, but cranial nerve palsies, especially facial paralysis, is most common. Diabetes (**Diabetes Insipidus**, Table I) may occur. Renal failure, (hypercalcemia and hypercalciuria) may occur, due to renal stones (calculi). Spontaneous improvement is common, with symptoms disappearing for months or years. Complete clearing of the disease occurs in one-third of the patients, recovery with minor residual symptoms in another

Medical data is for informational purposes only. You should always consult your family physician, or one of our referral physicians prior to treatment.

**Sarcoma**  
**Scaling Papular Diseases**  
**Schönlein's Purpura**  
**Scleroderma**

third, and progressive disease remains in the final third. Mortality is 5 to 8%.

A tumor made up of a substance like the embryonic connective tissue.

See **Psoriasis**, Table I.

See **Allergic Purpura**, Table II.

Widespread formation of fibrous tissue (fibroids) and vascular abnormalities in the skin, joint structures and internal organs (esophagus, intestinal tract, lung, heart and kidney, especially). May be mild or cause early death due to heart failure, kidney disease, lung complications, or intestinal malabsorption and a profound state of constitutional disorder (cachexia). Initial complaints include **Raynaud's phenomenon**, Table I, and swelling of the extremities of the fingers. **Polyarthralgia**, Table I, may occur early. **Polymyositis (Sclerodermatomyositis)**, Table I, symptoms may occur. With disease progression, the skin becomes taut, shiny and hyperpigmented. The face becomes masklike. Changes may include intestinal organs (visceral), lungs (pulmonary), destruction of bile and other liver cells (biliary cirrhosis of the liver). Joints may be painful because of friction, **Tendonitis**, Table I and that the large saclike cavities are filled with viscid fluid that lower friction around the joints (bursae sacs). There is blood-clotting, insoluble protein (fibrin) deposits on synovial tissue. Many other effects can occur in other parts of the body. (See **Systemic Lupus Erythematosus**, Table I)

See **Scleroderma**, Table I.

See **Parkinsonism**, Table I.

See **Sjögren's Syndrome**, Table I.

See **Esophageal Webs**, Table I.

**Sclerodermatomyositis**  
**Shaking Palsy**  
**Sicca Syndrome**  
**Sideropenic Dysphagia**  
**Sjögren's Syndrome (Mikulicz's disease)**

A marked dryness of all mucous membranes, resulting from deficient secretion of the glands, particularly the throat (laryngeal) and salivary glands, those of the upper respiratory tract, the sweat glands and the glands of the stomach. Also see **Trigeminal Neuralgia**, Table I.

Neck Pain. See **Fibrositis**, Table I.

**Spasmodic Torticollis**  
**Splenomegaly**

**Splenomegaly** is enlargement of the Spleen. Various disorders are associated with **Splenomegaly**. The spleen consists of two organs, an immune one, the "white pulp," consisting of lymphocytes and a reticuloendothelial one, the "red pulp," consisting of phagocytic macrophages and granulocytes lining vascular spaces (the cords and sinusoids). The white pulp generates antibodies to circulating antigens, and on occasion, inappropriate autoantibodies to circulating blood elements. White pulp also produces a leukocyte modulating hormone (tuftsin), which increases neutrophil phagocytosis and chemotaxis. Its absence is associated with increased susceptibility to infection. The red pulp removes unwanted particulate matter such as bacteria or aging blood elements. It provides a reservoir function for blood elements, such as leukocytes and platelets that can be released to the circulation. In stressed animals "autotransfusions" of red blood cells may occur from the spleen. The spleen may serve to replace bone marrow as a blood forming organ, among other functions. Various disorders are associated with **Splenomegaly**. Deficiency of cellular elements of the blood (**Cytopenia**, Table I), a reduction of one or more blood elements, resulting in diminution of hemoglobin (**Anemia**), deficiency in leukocytes, (**Leukopenia**, Table I), decrease in number of platelets (**Thrombocytopenia**, Table I), or any combination thereof in association with abnormal increase in normal cells in normal tissues (**Hyperplasia**, Table I) of the respective marrow precursors of the deficient cell type. Most of the presenting symptoms are those of the underlying disease. Besides noting an enlarged spleen, the following may be encountered: Left upper quadrant abdominal pain associated with splenic friction rubs which indicate splenic area of cellular death (necrosis) or coagulation (infarction), epigastric and splenic sounds (brutis) which may presage bleeding, early feeding satiation, and manifestations of mucosal bleeding. See **Amyloidosis**, Table I, **Anemia**, Table I, **Chronic Hepatitis**, Table I, **Hepatosplenomegaly**, Table I, **Juvenile Arthritis (Still's Disease)**, Table I, **Lymphoma**, Table I, **Polycythemia**, Table I, **Polymyositis**, Table I, and others.

See **Hashimoto's Thyroiditis**, Table I.

See **Juvenile Arthritis**, Table I.

**Spontaneous Myxoedema**  
**Still's Disease**  
**Systemic Lupus Erythematosus**

An inflammatory connective tissue disorder of unknown etiology occurring predominantly in young women, but also in children and older adults. A form of cellular death in which the tissue is changed into a dry, amorphous mass resembling cheese (fibrinoid necrosis) and where cellular bodies of altered nuclear material may be found in the tissues of any organ. May begin abruptly with fever, simulating acute infection, or may develop insidiously over months or years with only episodes of fever and general discomfort (malaise). Up to 90% complain of joint (articular) symptoms. Several skin (cutaneous) lesions may occur, including the characteristic cheek (malar) "butterfly" redness of skin due to congestion of capillaries (erythema). Other parts of the body may also be affected, and, the condition may spread so that the sympathetic appearance of the skin becomes confluent with others, including tissue swelling (edematous). Generalized loss of hair (alopecia) is frequent. Kidney (renal) involvement occurs in the majority of patients, and may become fatal. (See **Scleroderma**, Table I.)

**Takayasu's Disease**

A syndrome resulting from destruction of one or more of the large branches of the aortic arch.

Medical data is for informational purposes only. You should always consult your family physician, or one of our referral physicians prior to treatment.

**Temporal Arteritis  
Tendinitis**

Usually the result of arteriosclerosis and its complications, but syphilitic weakening of the artery walls (aneurysms) may also cause it. There are a group of patients, about 5%, in whom the condition results from a peculiar form of proliferative inflammation of the arteries (arteritis) usually occurring in young Oriental women 15 to 30 years of age, and is commonly referred to as Takayasu's disease, but it can also be found in woman and men of all ages. (Also see **Polyarteritis**, Table I.)

See **Polymyalgia Rheumatica**, Table I.

Inflammation of the lining of the tendon sheath (tenosynovium) and also quite frequently the enclosed tendon. The synovial-lined tendon sheath usually is the site of maximum inflammation, but the inflammatory response may involve the tendon itself. As a result of calcium deposits, for example, the tendon may be the site of primary irritation and inflammation surrounding the tendon sheath. Tendon sheaths may be affected by systemic diseases, such as **Rheumatoid Arthritis**, Table I, **Progressive Systemic Sclerosis**, Table I, **Gout**, Table III, **Reiter's Syndrome**, Table I and **Amyloidosis**, Table I, and also associated with elevated blood cholesterol levels (hyperlipoproteinemia, Type II). Extreme or repeated trauma, strain, or excessive exercise may also be causative. Most common sites of inflammation are the shoulder capsule and associated tendons, wrists, fingers, hip capsule and associated tendons, leg hamstrings and the heel tendon (Achilles). Involved tendon sheaths may be visibly swollen due to fluid accumulation and inflammation, or they may be dry but irregularly contoured, causing friction which is felt on movement of the tendon in its sheath. Local tenderness may be present, and it may be severe or associated with disabling pain on movement. Calcium deposition may occur in the tendon sheath, and may be seen by X-ray as calcific tendinitis. Recovery may take from 2 to 3 weeks to several months, in most cases.

See **Tendinitis**, Table I.

**Tenoysynovitis  
Thrombocytopenia  
Thrush  
Thyroidtoxicosis**

See **Splenomegaly**, Table I.

See **Candidiasis**, Table II; also see **Regional Enteritis**, Table I.

**Tic Douloureux  
Trigeminal Neuralgia**

See **Hashimoto's Thyroiditis**, Table I. (Also similar to **Primary Myxoedema**, Table I; or **Spontaneous Myxoedema** -- without goitre, Table I. Also see **Hyperthyroidism**, Table I.)  
See **Trigeminal Neuralgia**.

**Trigeminal Neuralgia** are bouts of severe pain resulting from one or more divisions of the 5th cranial nerve, most often the superior mandibular or maxillary. **Multiple Sclerosis**, Table I, sometimes causes **Trigeminal Neuralgia**. **Sjogren's Syndrome**, Table I or **Rheumatoid Arthritis**, Table I, may also accompany **Trigeminal Neuralgia**, Table I. Pain is often set off by touching a trigger point or by activity such as chewing or brushing the teeth. Pain is intense, and although each bout is brief, successive bouts may incapacitate the patient.

Neck pain. See **Fibrositis**, Table II.

**Torticollis  
Toxic Diffuse Goitre  
Toxic Nodular Goiter  
Tubal Pregnancy  
Ulcerative Colitis.  
Ulcerative Proctitis  
Uremia**

See **Hyperthyroidism**, Table I

See **Hyperthyroidism**, Table I.

See **Ectopic Pregnancy**, Table II.

See **Regional Enteritis**; also see Section II.

See **Ulcerative Colitis**, Table II.

**Urinary Calculi**

The presence of urinary constituents in the blood, and the toxic condition it produces. It is marked by nausea, vomiting headache, vertigo, dimness of vision, scant secretion of the urine from any cause.

**Urinary Calculi** (stones) may occur anywhere in the urinary tract and are common causes of pain, obstruction and secondary infection. About 1 in every 100 adults are hospitalized annually in the USA because of urinary stones. They are related to factors that increase the urine concentration of stone crystalloids, and other factors that favor their formation in normal urine concentrations. **Calculi** vary in size from microscopic to several centimeters. In adults, in the USA, about 90% of stones contain calcium and 65% oxalate, 5% are predominately urate and 2 to 3% are cystine. Magnesium ammonium phosphate stones parallels that of urea-splitting bacterial infections accompanied by elevated urine pH. Typical symptoms include excruciating intermittent pain, usually originating in the flank or kidney area and radiating across the abdomen along the course of the ureter, frequently into the region of the genitalia and inner side of the thigh. Gastrointestinal symptoms of nausea, vomiting, and abdominal distention may obscure the urinary origin. Chills, fever, discharge of bloody urea (hematuria) and frequency of urination are common, particularly as a calculus passes down the ureter. The affected kidney may become nonfunctioning temporarily.

See **Allergic Purpura**, Table II.

**Urticaria  
Uterine Fibroids**

These are noncancerous tumors composed of fibrous muscle or fully developed connective tissue. **Fibromyomas**, Table I, cause postmenopausal bleeding, but other causes should be ruled out, such as cancer (endometrial) or the abnormal multiplication of cells (hyperplasia). **Fibroids**, Table I, develop following the onset of menstruation, enlarge during pregnancy, and

Medical data is for informational purposes only. You should always consult your family physician, or one of our referral physicians prior to treatment.

decrease after menopause. They are thought to be estrogen dependent. One in five women in the United States has at least some evidence of **Fibroids**, with most occurring in women in their thirties and forties. **Fibroids** are much more common among black women than among white women. They are usually firm, spherical lumps that often occur in groups, and they vary in size, usually described in terms of vegetables and fruit -- pea, lemon, apple, cantaloupe, etc. They can grow near the outer surface of the uterus where they are easily detected during a pelvic examination, as well as near the inner lining of the uterus, where they may need ultrasound for detection. **Fibroids** normally shrink in size after menopause. Most women have no symptoms at all, but there may be lower abdominal pain, a feeling of fullness and pressure in the lower abdomen, and frequent urination caused by tumor pressure on the bladder, plus heavy menstrual periods, bleeding between periods, and increased menstrual cramps.

#### Uveitis

**Uveitis** is inflammation of the iris, ciliary body or choroid, called the uveal tract. **Anterior Uveitis** is inflammation of the iris (**Iritis**, Table I) or ciliary body (**Cyclitis**, Table I) or, more usually, of both (**Iridocyclitis**, Table I). Causes are varied and seldom identified. Spread of infection has often been blamed, but rarely identified. Viral infections and hypersensitivity reactions have also been implicated. Moderate to severe eye (ocular) and surrounding the eye (periocular) pain, sensitivity to light (photophobia), and tears (lacrimation) are common initial symptoms. Blurred vision and transient myopia may occur. The iris is dull and swollen and the pupil may be small and irregular. The aqueous humor often appears turbid, fibrin may be seen in the anterior chamber, inflammation of the cornea and conjunctiva (keratoconjunctivitis), and inflammatory cells may coalesce to form small, round, pale deposits on one of the five layers of the cornea (corneal endothelium). **Anterior Uveitis** may occur with various infectious diseases, with some other non-infectious diseases, and also with **Rheumatoid Arthritis**, Table I. Also see **Ulcerative Colitis**, Table II. Also see **Headache**, Table I and Table II. Various forms of inflammation of blood vessels.

#### Vasculitis

##### Villous Pigmented Synovitis

Tumorous, hard, small particles that create inflammatory response in joints, predominately occurring in young men. The knee is most commonly affected, then the hip, ankle, wrist and elbow. There is pain and swelling with joint motion. Discomfort is usually mild and intermittent, but may be persist if the joint tends to lock or if swelling and fluid leakage (effusion) are prominent. Joint erosion may occur, and cysts form, most commonly in the hips, hands, and feet, less commonly in the knee. May be confused with a possible malignancy.

See **Takayasu's Disease**, Table I.

##### Young Oriental Female Disease Wegener's Granulomatosis

A rare disease that begins as having local tumor or neoplasm inflammation of upper and lower respiratory mucosa, usually progressing into generalized, dead and tumorous vascular cells (necrotizing granulomatous vasculitis) and also inflammation of certain kidney cells (glomerulonephritis). The disease resembles an infectious process. Men are affected about twice as often as women. Disease can occur at any age. Onset may be insidious or acute. Presenting symptoms include severe discharge of a thin nasal mucus (rhinorrhea), inflammation of the sinuses (paranasal sinusitis), nasal mucosal ulcerations, with consequent secondary bacterial infection, running ear (serous or purulent otitis media) with hearing loss, cough, spitting of blood (hemoptysis) and inflammation of the lining of the lung (pleuritis.). At first, **Wegener's Granulomatosis** is often mistaken for chronic sinusitis. After a few weeks, inflammatory skin lesions and pulmonary lesions, along with vasculitis and kidney symptoms appear. Fever, malaise, loss of appetite, (anorexia), weight loss, migratory joint aches (Polyarthropathy), skin lesions and eye symptoms may present. Eventually the disease will progress to functional kidney (renal) impairment, without treatment. (Also see **Polyarteritis**, Table I.)

Neck Pain. See **Fibrositis**, Table I.

#### Wryneck

##### Whipple's Disease

An uncommon illness which occurs mostly with males ages 30 to 60. It is characterized by a deficiency in blood (anemia), increased skin pigmentation, joint symptoms (**Arthralgia**, Table I, and **Arthritis**, Table I), weight loss, diarrhea, and severe intestinal malabsorption. This disease affects many organs, such as the heart, lung, brain, Gastro-Intestinal tract, joints, eye, and serous cavities, but the small intestine is always severely involved. Symptoms are those of malabsorption, **Arthralgia** and **Arthritis** of the knees, wrists and back, coughing, abdominal pain and chest pain. Recovery is excellent, with proper treatment. Untreated, patients suffer the consequences of malabsorption, and death.

#### Table II: Arthritis (Rheumatic Diseases) and Related Diseases Caused or Suspected of Being Caused by Bacterial, Mycoplasmic or Viral Infections

The following organisms are either known, or suspected infectious organisms in creating Arthralgias:

1. Bacterial: *Gonococcus*, *Meingococcus*, *Pneumococcus*, *Streptococcus*, *Staphylococcus*, *Salmonella*, *Brucella*, *Streptobacillus moniliformis* (Haverhill fever), *Mycobacterium tuberculosis*, *Treponema pallidum* (syphilis), *Treponema pertenuis* (yaws), and others.
2. Rickettsial
3. Viral: Rubella, Mumps, Viral hepatitis, and others.

Medical data is for informational purposes only. You should always consult your family physician, or one of our referral physicians prior to treatment.

#### Acute Bacterial Arthritis

An acute **Arthritis** resulting from an infection in the synovial tissues surrounding the joints, by pus forming (pyogenic) bacteria. Although any pathogenic bacteria may infect the joint, in young children the most common is the staphylococci *Haemophilus influenzae*. Older children and adults are usually infected by gonococci, staphylococci, streptococci or pneumococci. The usual route for bacteria reaching the joint is through the blood, however, direct inoculations may occur in the joint during surgery or drug injection. Patients with **Rheumatoid Arthritis** are particularly susceptible to **Acute Bacterial Arthritis**. In infants who have a fever and are irritable, a careful examination may reveal failure to move a limb spontaneously, and tenderness, or pain with passive motion of the involved joint. Older children and adults complain of acute joint pain and stiffness, which, on examination, is warm, tender and swollen, with evidence of swelling and the escape of fluid into the tissue (effusion). Other signs of infection -- fever, chills, or an increase in the number of leukocytes in the blood (leukocytosis) -- are usually present. Patients who receive anti-inflammatory drugs may show very little response. A history of recent inflammation of the urethra (urethritis), inflammation of the fallopian tube (salpingitis) or bleeding from vessels of skin lesions (hemorrhagic vesicular skin lesions) suggests gonococcal arthritis.

#### Acute Cholecystitis

**Acute Cholecystitis** is in most instances caused by a gallstone which blocks up the outlet of the gallbladder or cystic duct. Inflammation of the gallbladder can occur with stones, bacterial infection by chemical irritation and the digestive activities of certain enzymes. Pain often occurs at night or in the early morning. Usually the pain is well localized to the right upper quadrant of the abdomen. epigastric pain and radiating pain to the back is frequent. Whether the onset is sudden or gradual, the pain reaches a plateau which it maintains with little fluctuation. Nausea, vomiting, and flatulence are frequent. Temperature elevation is slight. The right upper quadrant musculature is often found to be rigid with pronounced, localized tenderness. The liver edge is tender. Complications of infection involve *Escherichia coli*, *Bacillus aerogenes*, enterococci, *Klebsiella*, *Proteus vulgaris*, *Staphylococcus* and *Clostridium*.

#### Acute Infective Tubulointerstitial Nephritis Acute Pyelonephritis

See **Acute Pyelonephritis**.

**Acute Pyelonephritis** is an acute, diffuse, often bilateral pus producing (pyogenic) infection of the kidneys. Infections usually occur by the ascending urethral passage (meatus). Obstructions can be strictures, calculi, tumors, prostatic hypertrophy, or neurogenic bladder, all of which can predispose to infection. **Pyelonephritis** especially likely in females in childhood or during pregnancy, in diabetics, and after urethral catheterization, but is uncommon in males free from urinary tract abnormalities. Almost any pus-forming (pyogenic) bacteria may cause the problem, but *Escherichia coli* is the most common, accounting for 85% of uncomplicated infections. Staphylococcal bacteria may cause systemic kidney infection. **Candidiasis**, Table II, may also infect the kidney. Patients with indwelling instrumentation, or catheters, or suffering from diabetes mellitus, or those being treated with corticosteroids or immunosuppressive drugs are particularly likely to colonize with unusual organisms such as *Serratia*, *Mima-Herellea* and *Candida*. Typically the onset is rapid and characterized by chills, fever, flank pain, nausea, and vomiting. Bladder irritation from infected urine may result in frequency and urgency. Sometimes a physical examination will show abdominal rigidity which must be distinguished from that produced by intraperitoneal disease. An enlarged kidney may be felt. There may be tenderness on the infected side. **Chronic Pyelonephritis** may result in kidney failure from various causes, due to progressive failure.

See Table I.

#### Adenoid Hyperplasia Allergic Purpura

An acute or chronic inflammation of the vascular system (**Vasculitis**), affecting the skin, joints, and the gastrointestinal tract, as well as renal systems. The process often follows a streptococcal infection which damages the vessels (vascular endothelium). Blood and plasma leaks (effusion) into the skin, mucous, and adjacent portions of the cells (subcutaneous, submucous, and subserous surfaces). Skin lesions appear, varying in appearance, but **Purpura** is usually associated with a redness of the skin (**Erythema**) and a rash or hives (**Urticaria**). Fever and malaise are often present, and leakage into joints (effusions) or viscera may produce joint pain -- **Arthralgias** --(**Schonlein's Purpura**), or bouts of abdominal pain (**Henoch's Purpura**). Severe conditions may lead to death. Often, however, the disease is self-limiting and carries a good prognosis.

#### Appendicitis

**Appendicitis** is inflammation of the vermiform appendix. Acute **Appendicitis** is usually caused by *Escherichia coli* and other normal bowel flora. It is often preceded by an obstruction (in the appendiceal lumen) by kinking, swelling of the lymphoid tissue in the wall or a foreign body from the fecal stream. The condition is most common in adolescents and young adults, peaking between ages of 15 and 24, and the most frequent reason for surgery in infants and children. Inflammation causes swelling (edema) and cellular death (ischemia) in all layers of the appendix and can progress to gangrene and perforation. A perforated appendix can result in inflammation of the membrane that lines the abdominal walls, resulting in abdominal pain and tenderness, constipation, vomiting and moderate fever. Pain typically begins in the region

Medical data is for informational purposes only. You should always consult your family physician, or one of our referral physicians prior to treatment.

**Asthma**  
**Brucellosis**

over the pit of the stomach, and moves to the lower quadrant where it is persistent, steady, well localized and accentuated by movement, deep respiration, coughing or sneezing. Nausea and vomiting are common but not invariably present. Constipation may precede the condition, and the patient may not pass any rectal gas. Various other symptoms may be present depending upon the location of the appendix. Also see **Mesenteric Adenitis**. Possible viral or mold sources. See Table I.

This infectious disease, which is characterized by an acute feverish stage, has few or no local or regional signs. In the chronic phase there are relapses with fever, weakness, sweats and vague aches and pains. The causative microorganisms are *Brucella abortus* (cattle) *Brucella suis* (hogs), *Brucella melitensis* (sheep and goats), *Brucella canis* (dogs), and *Brucella rangiferi* (Alaskan and Siberian caribou). **Brucellosis** is acquired by contact with secretions and excretions of infected animals, by ingesting their products (milk, butter, etc.) which contain live organisms. It is rarely transmitted from one person to another. It is most prevalent in rural areas, and is an occupational disease of meat-packers, veterinarians, farmers, and livestock producers. Children are less susceptible. The incubation period varies from 5 days to several months, with an average of 2 weeks. Symptoms may vary in the early stages. Onset may be sudden and acute with chills and fever, severe headache, pains, malaise, and occasional diarrhea. Or onset may be insidious with mild malaise, muscular pain, headache, and pain in the back of the neck, followed by a rise in evening temperature. Complications may include inflammation of the covering of the brain (meningitis), of the brain (encephalitis), of the nerves (neuritis), of the testes (orchitis), of the gall bladder (cholecystitis), puss in the liver (hepatic suppuration) and bone lesions such as in the spine (**Spondylitis**; See Table II). Fevers may persist for 1 to 5 weeks, then go into remission for 2 to 14 day periods, and this may be repeated over years. Constipation is usually pronounced, with loss of appetite (anorexia), weight loss, abdominal pain, joint pain, headache, backache, weakness, irritability, insomnia, mental depression, and emotional instability. Enlargement of the spleen (**Splenomegaly**) may appear and lymph nodes may be slightly or moderately enlarged. Patients with acute, but uncomplicated **Brucellosis** usually recover in 2 to 3 weeks. The chronic disease may result in prolonged ill health, but is rarely fatal. Also see **Splenomegaly**.

**Bursitis**  
**Candidiasis**

See Table I.

*Candida albicans*, which is found most everywhere, invades various parts of bodily tissues, resulting in localized infections. Common sites of infection are the mouth as in infant **Thrush**, gastrointestinal tract, vagina, urinary tract, prostate gland and skin and fingernails and toenails. Under normal conditions our bodies are able to resist this invasion, as it does other germs. However, whenever various substances weaken the immunological system, the yeast/fungus organism begins to spread, and in the spreading creates virtual havoc throughout the body parts and systems. The yeast/fungus invasion may cripple the immune system so that it can no longer repel invaders. It can create allergies to chemicals and foods. It is believed that it invades the intestinal wall where toxins from microorganisms and protein molecules from food enter the blood stream, being there recognized as a foreign antigen. Because proteins are derived from common DNA (gene molecule) structure, each time a new protein enters directly into the bloodstream, it, too, can become recognized as a foreign invader, and thus a "cross-reactivity" occurs, causing one to have increasingly more **Food Allergies**, Table I. Yeast feeds on sugars and carbohydrates that easily convert to sugars. In turn, yeasts produce a series of chemical products as waste among which are acetaldehyde and ethanol. Ethanol is alcohol, and there are cases of people on record who have never drunk a drop of alcohol yet are daily inebriated. Acetaldehyde is produced as the alcohol breaks down and is about six times more toxic to brain tissue than ethanol. These two chemicals are probably responsible for the following effects. 1. Cell membrane defects, damage to red and white blood cells and other problems; 2. Enzyme destruction. Enzymes are the key to breaking down foods in the body so that they can be utilized as nourishment; 3. Abnormal hormone response. Hormones regulate bodily functions. Some of the symptoms caused by *Candida albicans* are these: 1. Allergic reactions; 2. Gastrointestinal problems: bloating and gas, diarrhea, abdominal pain, gastritis, gastric ulcers, constipation, and many others; 3. Respiratory system: sore throat, sore mouth, contribution to sinus infections, bronchial infections and pneumonia; 4. Cardiovascular system: palpitations, rapid pulse rate, pounding heart; 5. Genitourinary system: vaginitis, frequent urination, lack of bladder control, itchy rashes, etc.; 6. Musculoskeletal system: muscle weakness, leg pains, muscle stiffness, slow coordination, and so on; 7. Central Nervous system: Headaches, poor brain function, poor short-term memory, fuzzy thinking and so on; 8. Fatigue is extremely common as impaired metabolism doesn't enable the body to get enough fuel and impaired enzyme functioning inhibits energy production; 9. Weight gain is common. As can be observed by reviewing the above characteristic symptoms (which are not complete) many similar symptoms may "present" with **Rheumatoid Disease**, Table I. It is often difficult to discriminate between one cause and another as diseases operate on the same tissues, the same organs, producing similar symptoms, in similar ways. **Rheumatoid Disease** spreads with a weakening of the immunological system. *Candida albicans* spreads with a weakening of the immunological system. **Rheumatoid Disease** as well as **Candidiasis** seems to lead to **Food Allergies** and **Chemical Sensitivities**, Table I, over

Medical data is for informational purposes only. You should always consult your family physician, or one of our referral physicians prior to treatment.

time. Both diseases produce similar symptoms in many bodily tissues. Both diseases are systemic in nature. A **Candidiasis** victim does not necessarily have **Rheumatoid Disease**, but a **Rheumatoid Disease** victim almost certainly suffers from **Candidiasis**. **Candidiasis** spreads with the use of almost any kind of surgery where antibiotics were used, or if given antibiotics orally for any purpose, s/he probably suffers from some degree of **Candidiasis**, because antibiotics kill off the "good-guys" bacteria required in the intestinal tract for good nutrition, the yeast/fungus spreads, taking the "good-guys" place, and sends rootlets into the intestinal mucosa, helping to age the total system. These "good guys," such as *Lactobacillus acidophilus*, need to be replaced.

### **Cholangitis**

**Cholangitis** is inflammation of the bile ducts. Bacteria, most often *Escherichia coli*, enter the bile ducts via the lymphatic system or bloodstream or by regurgitation of intestinal contents. Usually the bile ducts are obstructed by stones or a tumor. Upper right abdominal pain, jaundice and fever with chills are characteristic. Pain is intermittent and colicky and can be severe. Patient is usually very ill and has only moderate tenderness to touch in the right upper quadrant of the abdomen.

### **Chronic Hepatitis Chronic Rhinitis Ectopic Pregnancy**

Hepatitis B virus causes a minority of cases. See Table I.  
See **Rhinitis**.

**Ectopic Pregnancy** occurs outside the mucous membrane that lines the uterus (endometrium) and endometrial cavity, that is, in the cervix, uterine tube, ovary, or the abdominal or pelvic cavity. The most common site is in the uterine tube, and about 50% are caused by a previous tubal infection. Spotting, and cramping pain usually begin shortly after the first missed menstrual period. Symptoms are similar to a threatened abortion. Gradual hemorrhage causes pain and pressure, but rapid hemorrhage results in hypotension or shock. Often, uterine bleeding precedes these events and there is irritation in the abdominal lining (peritoneal). The uterus is enlarged, the cervix is tender to motion and a tender mass may be felt in one fornix. The cul-de-sac may bulge (Culdocentesis), and yields non-clotting blood. At about 6 to 8 weeks of pregnancy a marked, sudden, lower abdominal pain may occur, followed by fainting. This usually indicates rupture of the tube with intra-abdominal hemorrhage.

### **Enlarged Tonsils Eustacian Salpingitis**

See **Adnoid Hyperplasia**, Table I, or any condition related to lymphatics.

**Eustacian Salpingitis** is inflammation of the eustacian tube. A patient with middle ear disorder may present with one or more of the following complaints: a feeling of fullness or pressure in the ear; constant or intermittent, mild excruciating pain; diminished hearing; tinnitus; and vertigo. These are all related to Otitis Media. In Acute Otitis Media fever and other systemic symptoms may be present, such as loss of appetite, vomiting, lethargy, and so on. The various symptoms result from infection, trauma, and disturbed pressure relationships secondary to eustachian tube obstruction. The causes may involve discharge of mucous (rhinorrhea), sore throat, allergic reactions, headache or other evidence of involvement of the covering of the brain (meningeal), or other systemic symptoms.

### **Familial Mediterranean Fever Fibrositis Gibraltar Fever Headache**

See **Brucellosis**.  
Possible virus or bacterial toxins may be the source. See Table I.  
See **Brucellosis**.

Syphilis, Tuberculosis and Cryptococcosis may create signs of **Meningeal Irritation** which is less marked than in the acute form. There may be cranial nerve palsies, delirium or confusion, dull to severe headaches, which are generalized over the crown. There may be a history of syphilis or tuberculosis. Also see **Headache**, Table I.

### **Henoch's Purpura Hodgkin's Disease Hypersensitivity Pneumonitis Lyme Arthritis Lyme Arthritis Disease**

See **Allergic Purpura**.  
See **Lymphoma**, Table I.  
See Table I.  
See **Lyme Arthritis Disease**.

An **Arthritis** by infection caused by the spiral-shaped bacterium *Borrelia burgdorferi*, carried by at least one species of tick, *Ixodes scapularis*. Of those infected about 60% will notice a round rash (erythema chornicum migrans); then, after three days to a month later, there will be a redness at or near the site of the tick bite. The reddened area does not itch or hurt, but will expand over time until it may measure several inches across. There is a clearing that begins in the center, as the rash enlarges, resembling a bulls-eye. Some may acquire the rash, but fail to see these characteristics because of the location. The rash may disappear within weeks or even days. Days or weeks later, a variety of other early symptoms affecting many areas of the body appears, and these symptoms are thought to be from the spread of the spirochete to many different tissues through the blood stream. Symptoms will include flu-like, such as chills, fever, fatigue, joint and muscle pains and loss of appetite. Sometimes neurological problems also appear, in about 20 percent of untreated patients, including **Bell's Palsy**. (See **Bell's Palsy**, Section I.) Other neurological afflictions include sensitivity to light, stiff neck, headache (meningitis), sleepiness, mood changes, memory loss (encephalitis), and irritation at the roots of the nerves stemming from the spinal cord causing painful tingling and numbness

**Medical data is for informational purposes only. You should always consult your family physician, or one of our referral physicians prior to treatment.** (radiculoneuropathy). Cardiac problems occur with 5 to 10 percent of those infected, if left untreated. Early symptoms may also include mild musculoskeletal disturbances where patients complain of vague, migrating pain without swelling in muscles, tendons or joints. Ten percent of those who reach the "arthritic" point will go on to suffer **Lyme Arthritis**. These patients will find joints swelling for months at a time, or certain joints will become enlarged and achy for a year or more. A joint that aches on one side will not necessarily lead to a matching (symmetrical) joint on the other side, as with **Rheumatoid Arthritis**. Although the skin, heart, joint and nervous system are usually targeted, *Borrelia burgdorferi* bacteria can invade any system in the body, and every organ or system can also produce its own variation of symptoms, similar to the syphilis spirochete.

**Mediterranean Fever  
Mesenteric Adenitis**

See **Brucellosis**.

**Non-Hodgkin's Disease**

**Nonviral Inflammatory Conditions of the Liver**

Inflammation of the membrane reflected over the viscera and lining the abdominal cavity (peritoneum) and blockage of lymph drainage usually resulting from **Appendicitis**. See **Lymphoma**, Table I.

There are a large number of micro-organisms that can affect the liver, including bacterial, fungi, and protozoa. Bacteria may include tuberculosis, leprosy, salmonellosis, brucellosis and other infections. The commonest organism is *Escherichia coli* found in 65% of the cases. Staphylococci are also common, and numerous other organisms have also been reported. The patient is toxic, wasted, and obviously seriously ill. There may be dull right upper quadrant discomfort with tender enlargement of the liver and pain accentuated by percussion over the lower rib cage. Jaundice may occur late. Infections caused by mycoses may produce focal or spreading (metastatic) lesions. Actinomycosis is caused principally by the anaerobic *Actinomyces israelii*. The patient is usually toxic and severely ill. Histoplasmosis is acquired by inhalation of airborne spores of *Histoplasma capsulatum*. Cryptococcosis is established as a primary infection in the lung following inhalation of *Cryptococcus neoformans*. Individuals with malignant disorders of the reticuloendothelial system are particularly susceptible. Most of the mycoses can cause liver lesions. *Coccidioides immitis*, *Candida albicans* and *Aspergillus fumigatus* are among those more commonly reported. The protozoan can cause Amebiasis. The highly infectious cysts of *Entamoeba histolytica* are ingested and change into the vegetative trophozoite form in the colon. The amebas then invade the colonic mucosa and are carried by the portal venous system. An amebic abscess in the liver is usually large. The onset is usually gradual with intermittent or no fever, and jaundice, if present, is mild, even though the patient looks ill. Right upper quadrant pain, aggravated by alcohol or certain positions, is greatest when the lesion is expanding rapidly. Tender, enlarged liver is virtually constant. Complications include secondary infection, and rupture of the abscess into the lungs, and other body parts. Additionally, malarial infection affects the liver as may Helminths and Spirochetes. See **Chronic Hepatitis**, Table I.

**Pericardial Disease  
Polyarteritis  
Psychotic Illness  
Regional Enteritis  
Reiter's Syndrome**

See Table I.

Possible viral or toxin source. See Table I.

See Table I.

Possible microorganism source. See Table I.

An arthritis of adult males, often associated with inflammation of the delicate membrane that lines the eyelids and covers the eyeball in front (conjunctivitis), inflammation of the fibromuscular tube which conveys the urine from the kidney to the bladder (urethritis), and infrequently with discharge of mucus from the horny layer of the skin (keratoderma blennorrhagica). Considerable evidence suggests that the cause is a myxovirus or mycoplasma. Onset may be acute or subacute. Usually it is asymmetric and one or many joints (mon- or polyarticular), with a preference for feet, ankles, knees and sacroiliac joints. Often there is history of recent sexual exposure. Diarrhea (dysentery) may precede the onset of joint symptoms followed in a few days to 2 weeks by inflammation of the urethra (urethritis) and a low-grade fever, and within another 2 to 4 weeks by conjunctivitis. Symptoms, however, may occur in a different order. Lesions may occur on the soles and palms, starting out as multiple, small, yellowish vesicles that break, become confluent, and form superficial ulcers. On the soles, lesions start as pustules and become encrusted. **Arthritis** tends to persist after the eye and urethra inflammation die down, but persistent **Arthritis** may continue in the sacroiliac joints or to inflammation of a vertebra (spondylitis). Recurrence of **Arthritis** is common with about one-half the patients, with subacute joint symptoms appearing intermittently for 10 years or longer. Recurrences may appear as a single symptom or in the form of the complete triad.

**Rheumatic Fever**

An acute inflammatory reaction to streptococcal infections that appears in the joints (**Arthritis**), brain (Chorea), heart (Carditis), subcutaneous tissues (nodules) and the skin (Erythema marginatum). **Rheumatic Fever** is the most common heart disease among school children, being found in 1 to 2%. It is responsible for about half of the rejections from military service for cardiovascular reasons. Manifesting **Arthralgia** is often mistaken for **Juvenile Arthritis**. Except for inflammation of the heart (Carditis), and the effects on it, joint pain and fever often subside within 2 weeks, sometimes more rapidly. New manifestations of heart inflammation (Carditis) will seldom occur after 2 to 3 weeks, except murmurs do not disappear. Usually

Medical data is for informational purposes only. You should always consult your family physician, or one of our referral physicians prior to treatment.

acute evidence of inflammation returns to normal within 5 months. Scars left by damage may contract and change, and secondary difficulties may develop in the muscles of the heart (myocardium) without inflammation. Long-term outcome depends upon the severity of the initial attack. Patients with severe attacks during the acute episode are usually left with residual heart disease that is worsened by the rheumatic disturbances to which they are particularly susceptible.

### Rhinitis

**Rhinitis** is the most frequent of the acute upper respiratory infections, characterized by edema of the nasal mucous membrane, nasal discharge and obstruction. It is the usual manifestation of a common cold, but it may also be caused by streptococcal, pneumococcal or staphylococcal infections. **Chronic Rhinitis** may occur in syphilis, tuberculosis, rhinosclerosis, rhinosporidiosis, leishmaniasis, blastomycosis, histoplasmosis, and leprosy, all conditions characterized by a tumor or neoplasm made up of granulation tissue (granuloma) and destruction of soft tissue, cartilage, and bone.

### Salpingitis

**Salpingitis** is inflammation of the fallopian tubes or eustachion tubes (**Eustachion Salpingitis**). The term **Pelvic Inflammatory Disease (PID)** is used to include infection of the cervix (cervicitis), the uterus (endometritis), or the ovaries (oophoritis). **Salpingitis** of the fallopina tubes occurs predominately during the late teens or early 20s in young, sexually active woman and is the result of an infection transmitted mostly by intercourse, less often by childbirth (puerperal fever) or by abortion. Patients with intrauterine devices (IUDs) are vulnerable **Salpingitis** rarely occurs before menarche, after menopause, or during pregnancy. The principal pathogen is *Neisseria gonorrhoeae*, but other gram-negative bacteria and gram positive cocci, as well as *Mycoplasma* and viruses are often implicated. Tuberculosis salpingitis is uncommon, especially in the absence of systemic tuberculosis. Infection begins intravaginally in most cases. The endocervical glands provide an optimum environment for organisms to flourish before spreading upward to produce a superficial inflammation of the lining of the uterus (endometritis) and inflammation of the lining of the ovarian duct (endosalpingitis). Although symptoms and signs may predominate on one side, both tubes are probably affected. The tubal infection produces a profuse exudate and leads to cellular clumping (agglutination) of mucosal folds, adhesions and tubal occlusion. Peritonitis is common. The ovaries tend to resist infection, but also may become invaded. With gonorrheal infection, a profuse purulent cervical discharge may appear within 3 to 5 days of intercourse, accompanied by malaise and low-grade fever and often associated with a purulent urethral discharge, urinary frequency and painful or difficult (dysuria) urination. These symptoms may subside or be mild or absent, but will reoccur, usually just after menses. Occasionally the symptoms do not occur until several months after infection. There will be severe lower abdominal pain, tenderness, fever, a purulent cervical discharge, signs of inflammation of the lining of the abdominal walls (peritoneum) and adjacent parts. Palpating the cervix or adjacent parts produces severe pain. There will be tenderness and muscle guarding. For nose and throat, see **Eustacian Salpingitis**.

See **Allergic Purpura**.

See **Candidiasis**, Table II.

See **Brucellosis**.

Schonlein's Purpura  
Thrush  
Undulant Fever  
Ulcerative Colitis

A chronic, inflammatory disease of the colon accompanied by ulcerations, and characterized by bloody diarrhea. Any age may be affected, but most frequently found between the ages of 15 and 40. The disease usually begins in the lower part of the colon extending to the rectum (rectosigmoid region), eventually involving the entire colon; or it may attack most of the large bowel at one time. **Ulcerative Proctitis**, a more benign form, usually remains localized to the rectum. As the disease progresses, the mucosa breaks down into a red, spongy surface dotted with a myriad of tiny blood- and pus-oozing ulcerations. Usual manifestations are a series of attacks of bloody diarrhea varying in intensity and duration, and these attacks may be acute and sudden, with violent diarrhea, fever, inflammation of the membrane surrounding the abdomen (peritonitis), and symptoms of excessive toxins (toxemia). More often, however, symptoms begin insidiously, with an increased urgency to defecate, mild lower abdominal cramps, with an appearance of blood and mucus in the stools. Complications might include hemorrhaging, the most common, tiny perforations of the bowel with localized obstruction of the bowel (ileus) and inflammation of the lining surrounding the abdomen (**Peritonitis**). Without effective treatment death may result. Extra complications include. **Arthritis** (peripheral), **Ankylosing Spondylitis**, inflammation of the sacrum and ilium (**Sacroilitis**), inflammation of the eye, (**Uveitis** : posterior), redness with nodules on the skin, (**Erythema Nodosum**), pus and dead tissue on the skin (**Pyoderma Gangrenosum**), and inflammation of the white portion of the eye, (**Episcleritis**), and, in children, severely retarded growth and development. The **Arthritis**, eye-white and skin complications tend to fluctuate with the colitis, whereas the **Spondylitis**, **Sacroilitis**, and eye-posterior (**Uveitis**) usually follow an independent course. Most colitis patients with spinal or sacroiliac problems also have evidence of **Uveitis**, and vice versa. These conditions may precede the colitis by many years, and may occur without bowel disease in relatives of colitis patients. There seems to be a genetic overlap among those suffering from **Ulcerative Colitis**, **Ankylosing Spondylitis**, **Uveitis**, [B27 genotype]. The risk of colon

Medical data is for informational purposes only. You should always consult your family physician, or one of our referral physicians prior to treatment.

cancer is great. A rapidly progressive initial attack may be fatal in nearly 10% of patients. Complete recovery after a single attack may occur in another 10%. In most cases, the disease is chronic, with repeated increases and remissions. Onset is sudden. After surgery, the disorder may appear from 2 to 7 days. Colicky pain and nausea occur, rapidly followed by prostration, high fever, and usually profuse, watery, and sometimes bloody diarrhea with offensive, greenish-yellow stools and severe fluid loss. Pulse rate rises and blood pressure falls. Dehydration, abdominal distention, and collapse follow. Slight abdominal tenderness may be present; bowel sounds may be normal or over-active. The stool will show gram-positive cocci, or *Staphylococcus aureus*. **Proctitis See Ulcerative Colitis.**

**Ulcerative  
Uveitis**

**Uveitis** may occur with syphilis, tuberculosis, and sarcoidosis. See **Uveitis**, Table I; also see **Sarcoidosis**, Table I.

Table III: Osteoarthritis and Degenerative Joint Diseases

**Herniated Disc  
Ligament Strain  
Low Back Pain**

See **Low Back Pain**.  
See **Low Back Pain**.

**Low Back Pain** (lumbar, lumbosacral, sacroiliac regions) is also often accompanied by pain down the legs along the distribution of the sciatic nerve (**Sciatica**), and this pain can be more severe than the backpain. Most **Low Back Pain** is thought to relate to degenerative disease. The condition increases with age, and with about 50% of those 60 years of age and over. **Low Back Pain** also may be caused by a ruptured intervertebral disc (**Ruptured Disc**) where herniation has caused inflammation or direct mechanical nerve root pressure. Herniation may be an isolated injury, or related to intervertebral joint degeneration. Fracture, infection, or tumor which involves the back, pelvis or behind theserous membrane reflected over the viscera and lining the abdominal cavity (retroperitoneum), or traumatic ligament rupture or the tearing of muscles beside the spine (paraspinous) may cause **Low Back Pain** accompanied by radiated **Sciatica** pain. Mild congenital defects are common (spina bifida, occulta, abnormal intervertebral facets, sacralization of transverse processes of the lowest lumber vertebra) and may predispose to low back strain. Slipping forward of a vertebra upon the one below (**Spondyloisthesis**) may cause back strain and **Low Back Pain**. History is important and often crucial for diagnosis. Increased pain may follow coughing or sneezing (Valsalva's maneuver), or limitation of straight-leg raising, and limitation of back motion. **Ligament Strain, Muscle Tear** or **Ruptured Disc** is suggested by its sudden onset. Symptoms usually begin 2 to 24 hours after heavy lifting, or other strenuous physical exertion. Localized tenderness over a particular interverbral space is significant and suggests a process in the back itself rather than in the pelvis or behind the serous membrane reflected over the viscera which lines the abdominal cavity (retroperitoneum). Intrapelvic source, and behind the serous membrane reflected over the viscera and lining the abdominal cavity (retroperitoneum), may be suggested by the presence of associated symptoms and by the absence of localizing signs in the back, other than limitation of motion due to pain. A **Ruptured Disc** is diagnosed by the presence of objective signs of nerve root irritation, such as muscle/nerve (motor) weakness. Tumors and infections may mimic a **Ruptured Disc**. Chronic **Arthritis** and underlying skeletal defects, such as **Spondyloisthesis**, are also suggested by gradual onset of **Low Back Pain**. Fracture and fracture dislocation may be ruled out by the history and the nature of the trauma, as well as X-ray.

**Muscle Tear  
Osteoarthritis  
Osteoarthritis**

See **Low Back Pain**.  
Chronic **Arthritis** of noninflammatory character. See **Osteoarthritis**

**Osteoarthritis** is the most common form of **Arthritis**. It is characterized by loss of joint (articular) cartilage, death of cells beneath the cartilage (subchondral bony sclerosis) and cartilage and bone proliferation at the joint margins with subsequent bony growth formations (osteophytes). Synovial inflammation is common. Factors considered of importance are genetic, metabolic, endocrine, biomechanical and hydrolytic enzymes. Abnormal biomechanical stress can lead to cartilage cell (chondrocyte) damage, and the release of the protein digesting (proteolytic) enzymes then results in joint (articular) cartilage degeneration. When cartilage repair cannot keep pace with degeneration, **Osteoarthritis** develops. **Osteoarthritis** may also be secondary to chronic trauma or underlying joint disease. Onset is usually gradual and localized to one or a few joints. Pain, usually the earliest symptom, is greatest after exercise. Stiffness or fibrositis commonly follows inactivity but usually only lasts for 15 to 30 minutes. Joint motion can be limited in severe cases. Tenderness and grating of bone on bone (crepitus) are present. Joints become larger because of the proliferation of bony material beyond the edge of the joints. Swelling may occur from the escape of synovial fluid. Deformity and dislocation (subluxation) occur as the disease progresses. Other symptoms throughout the body, or outside of the joints, are not observed. There is a wide variation in observed clinical manifestations. Enlargement of the joints (Heberden's nodes) closest to the nails (terminal interphalangeal joints) is common. Painful gelatinous cysts may also be present. Women are affected ten times more than men. Similar deformities (Bouchard's Nodes) may develop at the the next joint (proximal interphalangeal joint) also. When placed at the joints closest to the wrist (car-

Medical data is for informational purposes only. You should always consult your family physician, or one of our referral physicians prior to treatment.

pometacarpal), usually only the thumb is affected, which can cause pain and limitation of its use. Knee involvement causes pain, swelling and instability. In the hip, **Osteoarthritis** causes local pain and a limp. Pain may be present at the knee as a referential pain along a leg muscle nerve (obturator). **Spinal Osteoarthritis** is common, whence degenerative changes can occur without symptoms. However, severe pain may result from compression on nerves from the growth of bone or from a degenerative disc. Blood insufficiency, due to vascular insufficiency, may create further damage.

**Ruptured Disc**  
**Sciatica**  
**Spinal Osteoarthritis**  
**Spondyloisthesis**

See **Low Back Pain**.  
See **Low Back Pain**.  
See **Osteoarthritis**.

A deformity where the fifth lumbar vertebra and the portion of the spinal column above it slip forward over the base of the sacrum. See **Low Back Pain**.

**Uremia**

*Table IV: Rheumatic Diseases Known or Suspected to be Biochemical or Endocrine Abnormalities.*

I. Chondrocalcinosis (pseudogout), Alkaptonuria (ochronosis), Hemophilia, Sickle cell disease and other hemoglobinopathies, Agammaglobulinemia (hypogammaglobulinemia), Gaucher's disease, Hyperparathyroidism, Acromegaly, Thyroid acropachy, Hypothyroidism, Scurvy (hypovitaminosis C), Hyperlipoproteinemia Type II (Xanthoma tuberosum and tendinosum) and Type IV, Fabry's disease (angiokeratoma corporis diffusum or glycolipid lipidosis), Hermochromatosis, Wilson's disease, and others.

**Chondrocalcinosis**

Intermittent attacks of acute **Arthritis** and X-ray evidence of nodules of calcium salts under the skin, muscles, tendons and nerves (calcinosis) of the joints. Frequently associated with other conditions such as **Osteoarthritis**, diabetes mellitus, hyperparathyroidism, **Gout**, and a skin condition (hemochromatosis). The disease develops in maturity, and affects both sexes equally. Over 50 years of age, the incidence is appreciable. Unexplained acute or subacute attacks of **Arthritis** occur, usually in the peripheral joints. There is a suggestion that deposits of calcium pyrophosphate dihydrate in the cartilage is secondary to degenerative changes in the joint. Attacks follow the pattern of uric acid **Gout**, but are less severe, with complete freedom between attacks. At other times, distress persists, with low-grade symptoms similar to **Rheumatoid Arthritis**. Symptoms may persist intermittently for life.

**Gout**

A recurrent acute arthritis of the peripheral joints which results from deposits, in and about the joints and tendons, of crystals of monosodium urate from a supersaturated solution of uric acid in the blood (hyperuricemic). **Gout** may become chronic and deforming. Not everyone with supersaturated blood may develop gout, but the greater degree and duration of the supersaturation, the more probability of crystal deposition and of acute attacks of **Gout**. Men are most often affected. Usually an underlying abnormality in the metabolism of a chemical called "purines" is attributed to the Gouty condition, with excessive production of purines and diminished ability to clear uric acid as being the major factors. Associated with **Gout** can be a number of other diseases, including blood (hematopoietic) diseases, **Psoriasis**, thyroid (Myxedema), parathyroid (hypo- and hyperparathyroidism), hypertension, heart (myo-cardial infarction), kidney (advanced renal diseases), obesity, and several hereditary diseases (Down's syndrome and glycogen storage disease, Type I). There can be a sex-linked presence of uric acid in the urine (uricaciduria) with a deficiency of a certain enzyme (hypoxanthine-guanine phosphoribosyltransferase). This is associated with markedly excessive uric acid production, a tendency to develop uric acid kidney stones, and severe **Gouty Arthritis** and kidney disease (nephropathy) at an early age. Acute **Gouty Arthritis** may be the presenting symptom of another underlying metabolic disorder. An acute attack usually appears without warning, but may be precipitated by minor trauma, as from minor surgery or ill-fitting shoes, overindulgence in food or alcohol, fatigue, emotional problems, infections, or treatment with antibiotics, insulin or mercurial diuretics. One or more joints, usually at night, may signal the first onset. Pain becomes progressively more severe and is often described as a throbbing, crushing, or excruciating pain. Swelling, warmth, redness, and extreme sensitivity resemble an infection. The skin is tense, hot, shiny and dusky red or purplish in color. The big toe joint (metatarsophalangeal) is most frequently involved, but the instep, ankle, knee, wrist and elbow are also common sites. First attacks may show in only one joint, with later attacks involving more than one joint. Systemic reaction may include fever, heart rate increases (tachycardia), chills, malaise and an increase in leukocytes (leukocytosis) in the blood. First attacks may last but a few days. Later, untreated attacks may last for several weeks. Symptoms and signs may regress. Intervals between bouts vary considerably, but tend to become shorter as the disease progresses. Eventually, without treatment, several attacks will occur each year. With chronic **Gout**, hard or gritty (tophaceous) deposits appear in the joint and tendons. Chronic joint symptoms develop as permanent erosive joint deformity appears. There is limitation of motion, often involving multiple joints of the hands, feet, or both. Rarely is the shoulder, scacroiliac or sternoclavicular joints involved. Sometimes the cervical spine may be involved. Monosodium urate deposits are common in the walls of the sacs surrounding joints (bursae) and within tendon sheaths. Usually

Medical data is for informational purposes only. You should always consult your family physician, or one of our referral physicians prior to treatment.

the characteristics of **Gout** are so unique as to be easily diagnosed by patient history and examination. Therapy permits patients to live a full and productive life without serious disability, provided diagnosis is prompt and that the patient accepts the treatment. Some limited reconstruction of joint structure is possible. The hard, gritty deposits (tophi) can be resolved, joint function improved, and kidney dysfunction can be halted. Progressive, untreated kidney dysfunction leads to further gouty deposits, which accelerates the process, thus forming the greatest threat to life.

#### **Gouty Arthritis**

#### **Pseudogout**

*Table V: Other Rheumatic Diseases*

1. Traumatic and/or Neurogenic Disorders
2. Neoplasms
3. Allergy and Drug Reactions
4. Inherited and Congenital Disorders
5. Miscellaneous, unclassified.

#### **Charcot's Joints**

#### **Dupuytren's Contracture**

See **Gout**.

See Chondrocalcinosis.

See **Neurogenic Arthropathy**.

Contracture of the palm's band of tissue which invests and connects the muscles resulting in flexion deformities and loss of function of the fingers. The incidence within families is more than 50%, and the incidence increases progressively after age of 40. It is higher in chronic invalids, alcoholics, epileptics and patients with pulmonary tuberculosis and diabetes mellitus. It may appear as a late sequel to the Shoulder-Hand Syndrome. One or both hands may be affected, the right hand most frequently. The ring finger is involved most often, followed by the little, middle and index finger. Diagnosis is by visual inspection and touching with the diagnostician's hand (palpation). Initially a small painless plaque or nodule develops in the fascia of the palm and eventually extends. The skin adheres to the fascia and becomes puckered. Contracture of the fingers gradually follows. Extension of the affected fingers is impossible when the wrist is flexed and, in advanced cases, in any position. When the Shoulder-Hand Syndrome is involved, the hands may resemble those affected by **Scleroderma** or **Raynaud's Disease**. The condition progresses at a variable and unpredictable rate.

Destructive joints (arthropathy) where there is impaired pain perception or position sense.

See **Neurogenic Arthropathy**.

#### **Neurogenic Arthropathy**

#### **Neuropathic Arthropathy**

#### **Tennis Elbow**

A strain of the forearm (lateral) muscles near their origin, caused by repetitive strenuous turning of the palm of the hand upward (supination), and against resistance, as in manual screwdriving, or by violent extension of the wrist as in tennis. **Tennis Elbow** can be disabling. Pain may be severe and radiate to the outer side of the arm and forearm. It is aggravated by continued use, especially with the same movements under resistance. Weakness of wrist may be pronounced.

### **References**

\* All definitions from:

1. *The Merck Manual of Diagnosis and Therapy*, 16th Edition, Merck Sharp & Dohme Research Laboratories, division of Merck & Co., Inc., Rahway, N.J., 1992.
2. *The American Illustrated Medical Dictionary*, 19th edition, Revised and Enlarged, W.B. Saunders Company.
3. *Taber's Cyclopedic Medical Dictionary*, 12th Edition, F.A. Davis Company, Philadelphia.
4. *The Causation of Rheumatoid Disease and Many Human Cancers*, IJI Publishing Co., Ltd., Roger Wyburn-Mason, M.D., Ph.D., 1978.

The Arthritis Trust of America®/Rheumatoid Disease Foundation, 7376 Walker Road, Fairview, TN 37062