

SUMMARY**Integumentary system**

Pressure sores	page 2
Burns	page 3

Skeletal system

Fractures	page 4
Spinal stenosis	page 5

Muscular system

Muscular Dystrophy	page 6
Achilles Bursitis	page 7

Nervous system

Dementia	page 8
Spina bifida	page 9

Endocrine system

Gigantism	page 10
Acromegaly	page 11

Respiratory system

Lung cancer	page 12
Pertussis	page 13

Cardiovascular system

Gangrene	page 14
Epistaxis	page 15

Lymphatic system

Lymphoma	page 16
Hodgkin's disease	page 17

Digestive system

Colitis	page 18
Candida	page 19

Urinary system

Dysuria	page 20
Enuresis	page 21

Reproductive system

Frigidity	page 22
Prolapse	page 23

INTEGUMENTARY SYSTEM – Pressure sores/Bed sores

Pressure sores develop when compression of the skin in one area of the body cuts off the blood supply, usually when someone sits or lies in one position for too long.

A pressure sore may initially appear as a red area of skin that doesn't disappear after a few hours. It may feel tender and become painful and purple in colour.

An open sore may develop when an area of tissue dies, which can sometimes become infected.

In severe cases the sore increases in size and depth (sometimes remarkably rapidly) and may cause such destruction of the fat and muscle layers underneath the skin that the bones are exposed. Very large sores, where the nerves are destroyed, may be remarkably painless.



Sores often develop on the areas that take the pressure when we sit or lie down, such as the:

- Hips.
- Buttocks.
- Base of the spine.
- Heels.
- Ankles.
- Shoulders, especially where bony prominences aren't protected by much fat.

INTEGUMENTARY SYSTEM – Burns

A burn is damage to your body's tissues caused by heat, chemicals, electricity, sunlight or radiation. Scalds from hot liquids and steam, building fires and flammable liquids and gases are the most common causes of burns.

There are three types of burns:

- First-degree burns damage only the outer layer of skin
- Second-degree burns damage the outer layer and the layer underneath
- Third-degree burns damage or destroy the deepest layer of skin and tissues underneath



Burns can cause swelling, blistering, scarring and, in serious cases, shock and even death. They also can lead to infections because they damage your skin's protective barrier. Antibiotic creams can prevent or treat infections. After a third-degree burn, you need skin or synthetic grafts to cover exposed tissue and encourage new skin to grow. First- and second-degree burns usually heal without grafts.

SKELETAL SYSTEM – Fractures

A broken bone or bone fracture occurs when a force exerted against a bone is stronger than it can structurally withstand.

Bones are a form of connective tissue, reinforced with calcium and bone cells. Bones have a softer centre, called marrow, where blood cells are made. The main functions of the skeleton include support, movement and protection of vulnerable internal organs.

There are different types of bone fractures that vary in severity. Factors that influence severity include the degree and direction of the force, the particular bone involved, and the person's age and general health.

Common sites for bone fractures include the wrist, ankle and hip. Hip fractures occur most often in elderly people. Broken bones take around four to eight weeks to heal, depending on the age and health of the individual, and the type of break.



The symptoms of a bone fracture depend on the particular bone and the severity of the injury, but may include: pain, swelling, bruising, deformity, inability to use the limb.

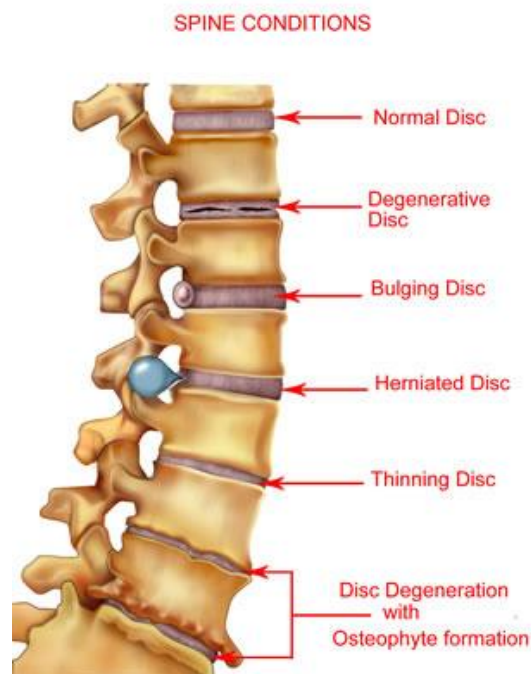
SKELETAL SYSTEM – Spinal stenosis

Spinal stenosis is narrowing of the spinal column that causes pressure on the spinal cord, or narrowing of the openings (called neural foramina) where spinal nerves leave the spinal column.

Spinal stenosis typically develops as a person ages and the disks become drier and start to shrink. At the same time, the bones and ligaments of the spine swell or grow larger due to arthritis or chronic inflammation.

Often, symptoms will be present and gradually worsen over time. Most often, symptoms will be on one side of the body or the other.

- Numbness, cramping, or pain in the back, buttocks, thighs, or calves (or problems in the lower back), or in the neck, shoulders, or arms (or problems in the neck)
- Weakness of a portion of a leg or arm



Patients with spinal stenosis may be able to ride a bicycle with little pain.

MUSCULAR SYSTEM – Muscular dystrophy

Muscular dystrophy is a group of inherited disorders that involve muscle weakness and loss of muscle tissue, which get worse over time.

Muscular dystrophies, or MD, are a group of inherited conditions, which means they are passed down through families. They may occur in childhood or adulthood. There are many different types of muscular dystrophy. They include:

- Becker muscular dystrophy
- Duchenne muscular dystrophy
- Emery-Dreifuss muscular dystrophy
- Facioscapulohumeral muscular dystrophy
- Limb-girdle muscular dystrophy
- Myotonia congenita
- Myotonic dystrophy



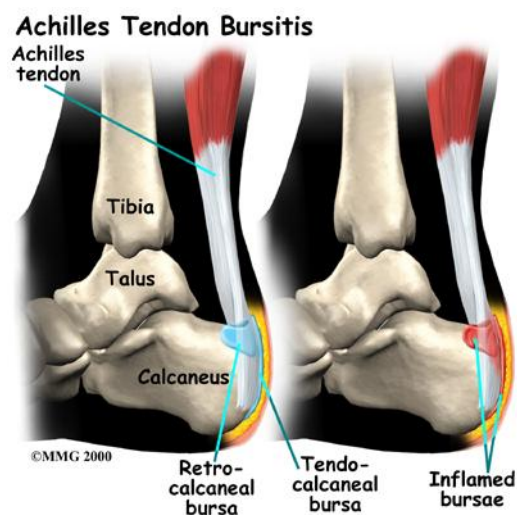
Symptoms:

- Mental retardation (only present in some types of the condition)
- Muscle weakness that slowly gets worse
 - Delayed development of muscle motor skills
 - Difficulty using one or more muscle groups
 - Frequent falls
 - Loss of strength in a muscle or group of muscles as an adult
 - Loss in muscle size
 - Problems walking (delayed walking)

MUSCULAR SYSTEM – Achilles Bursitis

Achilles tendon bursitis is a common foot pain in athletes, particularly runners. It can often be mistaken for Achilles tendinitis or can also occur in conjunction with Achilles tendinitis. A bursa is a small sack of fluid that sits between a tendon and a bone to help the tendon move smoothly over the bone.

Achilles tendon bursitis is often mistaken for Achilles tendinitis. It is possible for the athlete to have both Achilles tendinitis and achilles tendon bursitis at the same time (Haglund's syndrome).



Symptoms:

- Pain at the back of the heels especially when running uphill or on soft surfaces.
- Tenderness and swelling which might make it difficult to wear certain shoes on the feet.
- When pressing fingers in both sides of the heel a spongy resistance may be felt.

NERVOUS SYSTEM – Dementia

Dementia is a loss of brain function that occurs with certain diseases. It affects memory, thinking, language, judgment, and behavior.

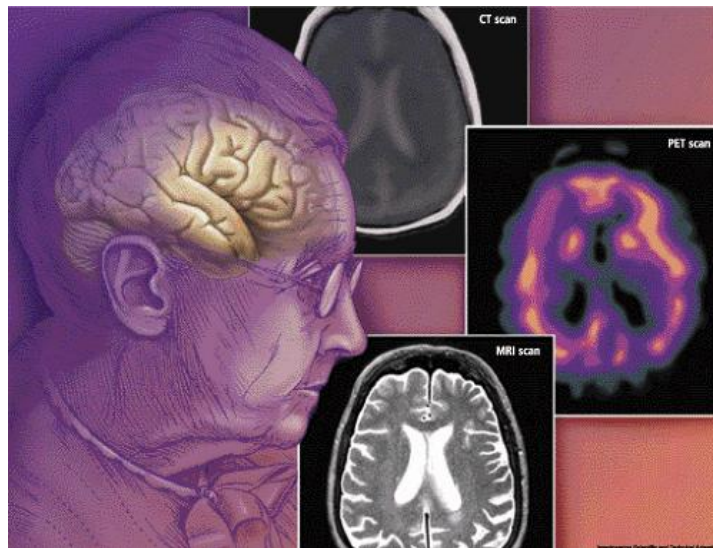
Most types of dementia are nonreversible (degenerative). Nonreversible means the changes in the brain that are causing the dementia cannot be stopped or turned back. Alzheimer's disease is the most common type of dementia.

Lewy body disease is a leading cause of dementia in elderly adults. People with this condition have abnormal protein structures in certain areas of the brain.

Dementia also can be due to many small strokes. This is called vascular dementia.

Dementia symptoms include difficulty with many areas of mental function, including:

- Language
- Memory
- Perception
- Emotional behavior or personality
- Cognitive skills (such as calculation, abstract thinking, or judgment)



Dementia usually first appears as forgetfulness.

Mild cognitive impairment is the stage between normal forgetfulness due to aging and the development of dementia. People with MCI have mild problems with thinking and memory that do not interfere with everyday activities.

NERVOUS SYSTEM – Spina bifida

Spina bifida is a birth defect in which the backbone and spinal canal do not close before birth. The condition is a type of spina bifida.

Normally, during the first month of a pregnancy, the two sides of the spine (or backbone) join together to cover the spinal cord, spinal nerves and meninges (the tissues covering the spinal cord). Spina bifida refers to any birth defect involving incomplete closure of the spine.

Myelomeningocele is the most common type of spina bifida. It is a neural tube defect in which the bones of the spine do not completely form, resulting in an incomplete spinal canal. This causes the spinal cord and meninges (the tissues covering the spinal cord) to stick out of the child's back.

Myelomeningocele may affect as many as 1 out of every 800 infants.



A newborn may have a sac sticking out of the mid to lower back. The doctor cannot see through the sac when shining a light behind it. Symptoms include:

- Loss of bladder or bowel control
- Partial or complete lack of sensation
- Partial or complete paralysis of the legs
- Weakness of the hips, legs, or feet of a newborn

ENDOCRINE SYSTEM – Gigantism

Gigantism is abnormally large growth due to an excess of growth hormone during childhood, before the bone growth plates have closed.

The most common cause of too much growth hormone release is a noncancerous (benign) tumor of the pituitary gland. Other causes include:

- Carney complex
- McCune-Albright syndrome (MAS)
- Multiple endocrine neoplasia type 1 (MEN-1)
- Neurofibromatosis

If excess growth hormone occurs after normal bone growth has stopped, the condition is known as acromegaly.

The child will grow in height, as well as in the muscles and organs. This excessive growth makes the child extremely large for his or her age.



Other symptoms include:

- Delayed puberty
- Double vision or difficulty with side (peripheral) vision
- Frontal bossing and a prominent jaw
- Headache
- Increased sweating

ENDOCRINE SYSTEM – Acromegaly

Acromegaly is a chronic metabolic disorder in which there is too much growth hormone and the body tissues gradually enlarge.

Acromegaly occurs in about 6 of every 100,000 adults. It is caused by abnormal production of growth hormone after the skeleton and other organs finish growing.

Excessive production of growth hormone in children causes gigantism rather than acromegaly.

The cause of the increased growth hormone release is usually a noncancerous (benign) tumor of the pituitary gland. The pituitary gland, which is located just below the brain, controls the production and release of several different hormones, including growth hormone.



Symptoms:

- Body odor
- Carpal tunnel syndrome
- Decreased muscle strength (weakness)
- Easy fatigue
- Enlarged bones of the face
- Enlarged feet
- Enlarged hands
- Enlarged glands in the skin (sebaceous glands)
- Enlarged jaw (prognathism) and tongue

RESPIRATORY SYSTEM – Lung cancer

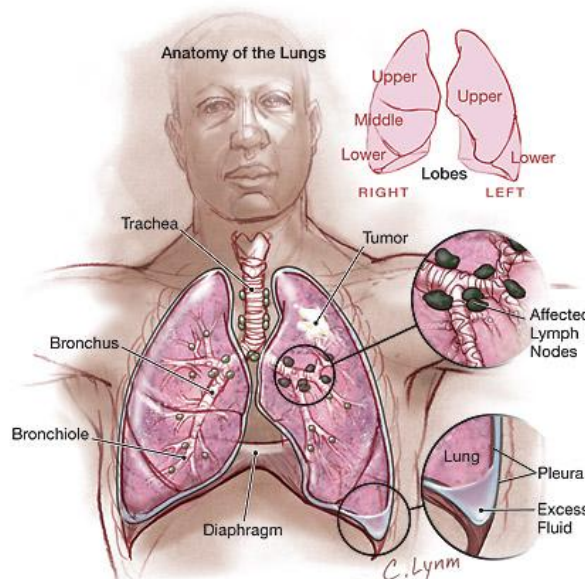
Lung cancer is cancer that starts in the lungs.

The lungs are located in the chest. They help you breathe. When you breathe, air goes through your nose, down your windpipe (trachea), and into the lungs, where it spreads through tubes called bronchi. Most lung cancer begins in the cells that line these tubes.

There are two main types of lung cancer:

- Non-small cell lung cancer (NSCLC) is the most common type of lung cancer.
- Small cell lung cancer makes up about 20% of all lung cancer cases.

Lung cancer is the deadliest type of cancer for both men and women. Each year, more people die of lung cancer than breast, colon, and prostate cancers combined.



Symptoms depend on the specific type of cancer you have, but may include:

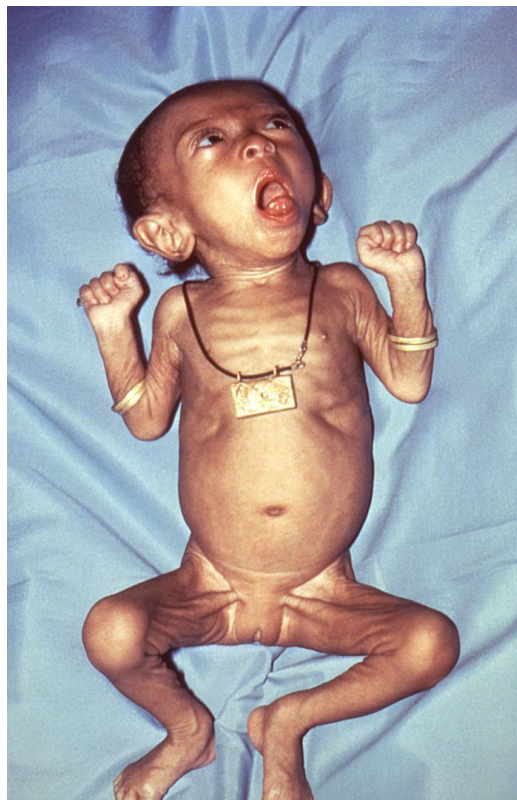
- Cough that doesn't go away
- Coughing up blood
- Shortness of breath
- Wheezing
- Chest pain

RESPIRATORY SYSTEM – Pertussis

Pertussis is a highly contagious bacterial disease that causes uncontrollable, violent coughing. The coughing can make it hard to breathe. A deep "whooping" sound is often heard when the patient tries to take a breath.

When an infected person sneezes or coughs, tiny droplets containing the bacteria move through the air, and the disease is easily spread from person to person.

Whooping cough can affect people of any age. Before vaccines were widely available, the disease was most common in infants and young children. Now that most children are immunized before entering school, the higher percentage of cases is seen among adolescents and adults.



Initial symptoms, similar to the common cold, usually develop about a week after exposure to the bacteria.

Severe episodes of coughing start about 10 to 12 days later. In children, the coughing often ends with a "whoop" noise. The sound is produced when the patient tries to take a breath. The whoop noise is rare in patients under 6 months of age and in adults.

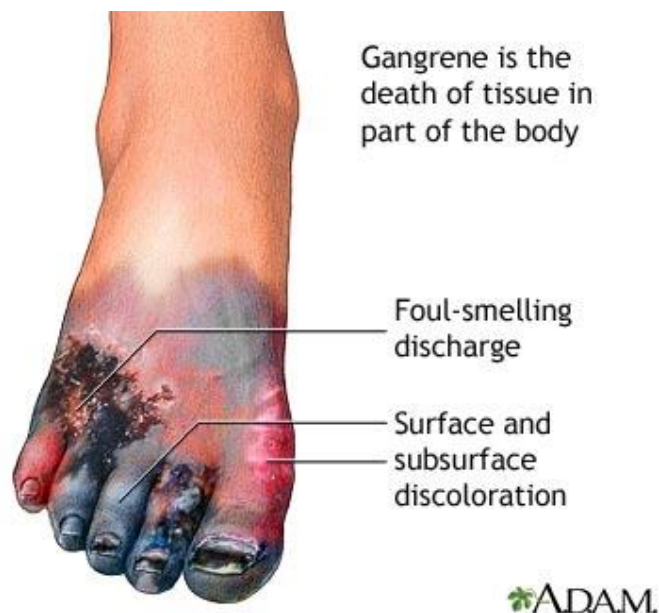
CARDIOVASCULAR SYSTEM – Gangrene

Gangrene happens when a body part loses its blood supply. This may happen from injury, an infection, or other causes. You have a higher risk for gangrene if you have:

- A serious injury
- Blood vessel disease (such as arteriosclerosis, also called hardening of the arteries, in your arms or legs)
- Diabetes
- Suppressed immune system (for example, from HIV or chemotherapy)
- Surgery

The symptoms depend on the location and cause of the gangrene. If the skin is involved, or the gangrene is close to the skin, the symptoms may include:

- Discoloration (blue or black if skin is affected; red or bronze if the affected area is beneath the skin)
- Foul-smelling discharge
- Loss of feeling in the area (which may happen after severe pain in the area)



If the affected area is inside the body (such as gangrene of the gallbladder or gas gangrene), the symptoms may include:

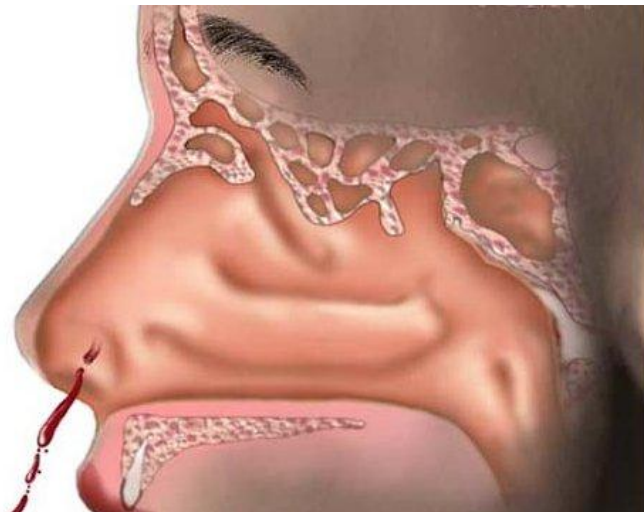
- Confusion
- Fever
- Gas in tissues beneath the skin

CARDIOVASCULAR SYSTEM – Epistaxis

The purpose of the nose is to warm and humidify the air that we breathe in. The nose is lined with many blood vessels that lie close to the surface where they can be injured and bleed. Once a vessel starts to bleed, the bleeding tends to recur since the clot or scab is easily dislodged. Nosebleeds, called epistaxis, can be messy and even scary, but often look worse than they are. Many can be treated at home, but some do require medical care.

Common causes of nosebleeds include:

- Dry, heated, indoor air, which dries out the nasal membranes and causes them to become cracked or crusted and bleed when rubbed or picked or when blowing the nose (more common in winter months)
- Dry, hot, low-humidity climates, which can dry out the mucus membranes
- Colds (upper respiratory infections) and sinusitis, especially episodes that cause repeated sneezing, coughing, and nose blowing
- Injury to the nose and/or face
- Allergic and non-allergic rhinitis (inflammation of the nasal lining)



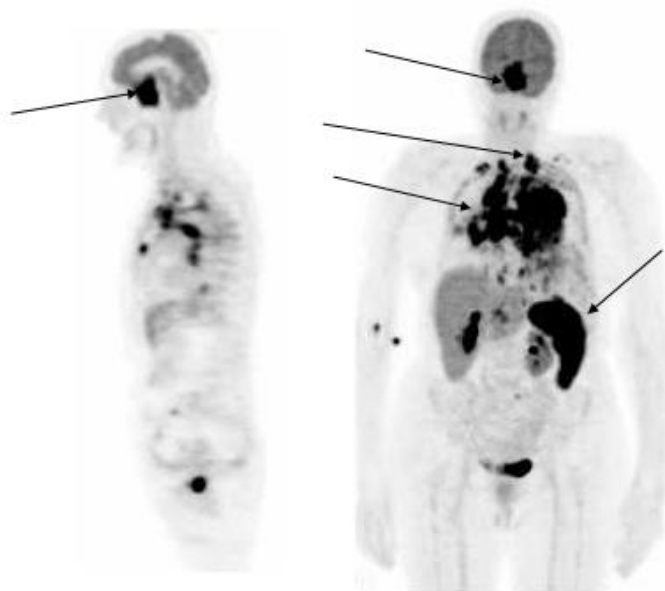
Treatments, depending on the cause, could include:

- Cauterization – the application of a chemical substance (silver nitrate) or heat energy (electrocautery) to seal the bleeding blood vessel.
- Foreign body removal

LYMPHATIC SYSTEM – Lymphoma

Lymphoma is a cancer in the lymphatic cells of the immune system. Typically, lymphomas present as a solid tumor of lymphoid cells.

Treatment might involve chemotherapy and in some cases radiotherapy and/or bone marrow transplantation, and can be curable depending on the histology, type, and stage of the disease.^[1] These malignant cells often originate in lymph nodes, presenting as an enlargement of the node (a tumor). It can also affect other organs in which case it is referred to as extranodal lymphoma. Extranodal sites include the skin, brain, bowels and bone. Lymphomas are closely related to lymphoid leukemias, which also originate in lymphocytes but typically involve only circulating blood and the bone marrow (where blood cells are generated in a process termed haematopoiesis) and do not usually form static tumors.^[1] There are many types of lymphomas, and in turn, lymphomas are a part of the broad group of diseases called hematological neoplasms.



Some forms of lymphoma are categorized as indolent (e.g. small lymphocytic lymphoma), compatible with a long life even without treatment, whereas other forms are aggressive (e.g. Burkitt's lymphoma), causing rapid deterioration and death. However, most of the aggressive lymphomas respond well to treatment and are curable. The prognosis therefore depends on the correct diagnosis and classification of the disease, which is established after examination of a biopsy by a pathologist (usually a hematopathologist).

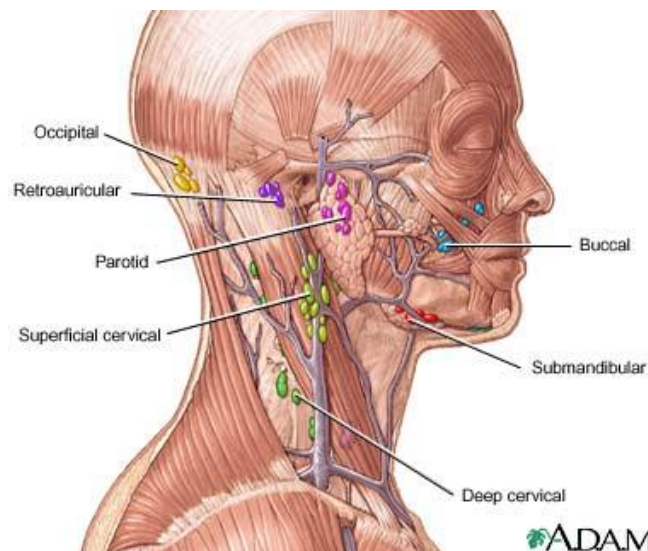
LYMPHATIC SYSTEM – Hodking’s disease

Hodgkin's lymphoma is a cancer of lymph tissue found in the lymph nodes, spleen, liver, bone marrow, and other sites.

The first sign of this cancer is often an enlarged lymph node which appears without a known cause. The disease can spread to nearby lymph nodes. Later it may spread to the spleen, liver, bone marrow, or other organs.

The cause is not known. Hodgkin's lymphoma is most common among people ages 15 - 35 and 50 - 70. Infection with the Epstein-Barr virus (EBV) is thought to contribute to most cases.

- Fatigue
- Fever and chills that come and go
- Itching all over the body that cannot be explained
- Loss of appetite
- Soaking night sweats
- Painless swelling of the lymph nodes in the neck, armpits, or groin (swollen glands)
- Weight loss that cannot be explained



Other symptoms that may occur with this disease:

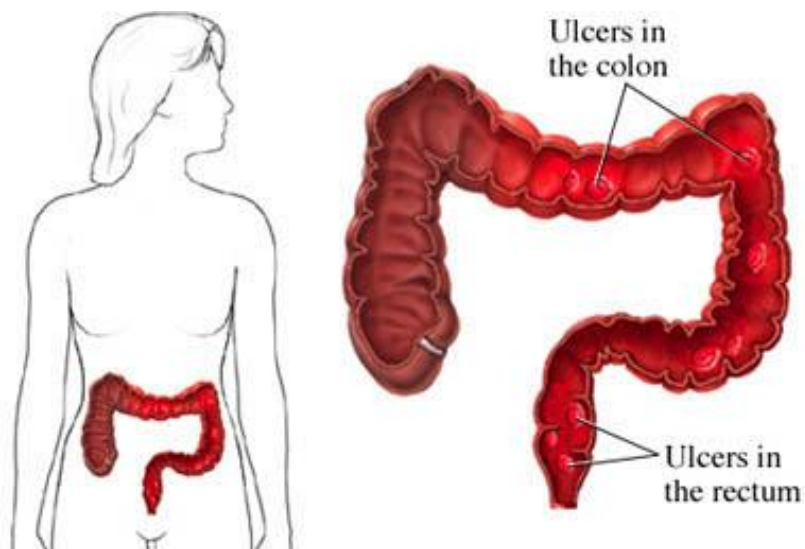
- Coughing, chest pains, or breathing problems if there are swollen lymph nodes in the chest
- Excessive sweating
- Pain or feeling of fullness below the ribs due to swollen spleen or liver
- Pain in lymph nodes after drinking alcohol

DIGESTIVE SYSTEM – Colitis

Colitis is swelling (inflammation) of the large intestine (colon).

Colitis can have many different causes, including:

- Acute and chronic infections, including food poisoning
- Inflammatory disorders (ulcerative colitis, Crohn's colitis, lymphocytic and collagenous colitis)
- Irritable bowel syndrome
- Lack of blood flow (ischemic colitis)
- Past radiation to the large bowel



Symptoms can include:

- Abdominal bloating
- Abdominal pain that is constant or comes and goes
- Bloody stools
- Chills
- Constant urge to have a bowel movement

DIGESTIVE SYSTEM – Candida

Candida is a genus of yeasts. Many species are harmless commensals or endosymbionts of animal hosts including humans, but other species, or harmless species in the wrong location, can cause disease. Candida albicans can cause infections (candidiasis or thrush) in humans and other animals, especially in immunocompromised patients.

Many species are found in gut flora, including *C. albicans* in mammalian hosts, whereas others live as endosymbionts in insect hosts.^{[2][3]}

Systemic infections of the bloodstream and major organs, particularly in immunocompromised patients, affect over 90,000 people a year in the U.S., with a 40-50% mortality.^{[4][5]}

Antibiotics promote yeast infections, including gastrointestinal candida overgrowth, and penetration of the GI mucosa.^[6]



After radiation treatment fungal infections such as candida are common, but easily resolved.

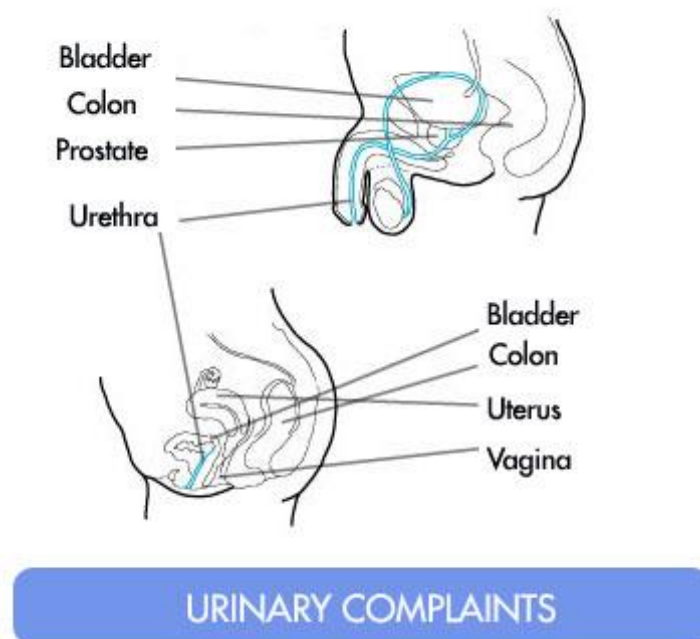
Candida are almost universal on normal adult skin^[10] and albicans is part of the normal flora of the mucous membranes of the respiratory, gastrointestinal, and female genital tracts which cause no disease.

URINARY SYSTEM – Dysuria

Dysuria, defined as pain, burning, or discomfort on urination, is more common in women than in men.

Although urinary tract infection is the most frequent cause of dysuria, empiric treatment with antibiotics is not always appropriate. Dysuria occurs more often in younger women, probably because of their greater frequency of sexual activity. Older men are more likely to have dysuria because of an increased incidence of prostatic hyperplasia with accompanying inflammation and infection.

Dysuria most often indicates infection or inflammation of the bladder and/or urethra. Other common causes of dysuria include prostatitis and mechanical irritation of the urethra in men, and urethrorrhinitis and vaginitis in women.



Dysuria can also result from malformations of the genitourinary tract, neoplasms, neurogenic conditions, trauma, hormonal conditions, interstitial cystitis, and psychogenic disorders

URINARY SYSTEM – Enuresis

Bedwetting is involuntary urination in children over 5 to 6 years old. It may occur at any time of the day or night. This article focuses on nighttime bedwetting.

Children develop complete control over their bladders at different ages. Nighttime dryness is usually the last stage of toilet learning. When children wet the bed more than twice per month after age 5 or 6, it is called bedwetting or nocturnal enuresis.

Bedwetting is common. More than 5 million children in the U.S. wet the bed at night.

Children who were dry for at least 6 months and then started wetting again have secondary enuresis. There are many reasons that children wet the bed after being fully toilet trained. It might be physical, emotional, or just a change in sleep.



The main symptom is involuntary urination, usually at night, that occurs at least twice per month.

REPRODUCTIVE SYSTEM – Frigidity

Frigidity a sexual problem, it is a woman's lack of interest or inability to feel pleasure during sexual intercourse.

Signs of frigidity include feelings of shame, fear about sexual matters, and painful spasm during coitus, complete emotional detachment during intercourse, but the absence of a dramatic orgasmic climax in intercourse does not of itself denote frigidity. Most woman experience a lack of desire for intercourse when she is tired, worried, depressed, afraid of pregnancy, and upset at her partner, this occasional lack of interest is normal and does not constitute habitual frigidity. The more sexually experienced a woman is, the less likely she is to be frigid. Studies have also found that the more enlightened a woman is, the less likely she is to suffer from frigidity.



Causes of Frigidity:

- a. Psychological. Psychological problems such as a trauma in childhood and marital problems are the usual causes of frigidity. Treatment: If the problem is an emotional one, brief counseling and psychoanalysis may be helpful.
- b. Physical and Hormonal. Lack of vaginal lubrication or an incorrect diet may also contribute

REPRODUCTIVE SYSTEM – Prolapse

Prolapse literally means "to fall out of place", from the Latin prolabi meaning "to fall out". In medicine, prolapse is a condition where organs, such as the uterus, fall down or slip out of place. It is used for organs protruding through the vagina or the rectum or for the misalignment of the valves of the heart. A spinal disc herniation is also sometimes called "disc prolapse".

Relating to the uterus, prolapse condition results in an inferior extension of the organ into the vagina, causing weakened muscles.

The main type of prolapse of heart valves in humans is mitral valve prolapse (MVP), which is a valvular heart disease characterized by the displacement of an abnormally thickened mitral valve leaflet into the left atrium during systole.

Rectal prolapse is a condition in which part of the wall or the entire wall of the rectum falls out of place. In some cases, the rectum may protrude.



Uterine prolapse (or Pelvic organ prolapse) occurs when the female pelvic organs fall from their normal position, into or through the vagina.