# Adrenocortical Cancer

Adrenocortical cancer is a rare disease in which cancer forms in the cortex (outer layer) of an adrenal gland. There are two adrenal glands. One sits on top of each kidney. The adrenal cortex makes important hormones, including ones that keep water and salt in balance, control blood pressure, and help the body use energy.

Adrenocortical tumors usually make extra amounts of one or more adrenal hormones, which may cause symptoms.

Certain inherited disorders increase the risk of adrenocortical cancer. These include Li-Fraumeni syndrome, Beckwith-Wiedemann syndrome, and Carney complex.

Adrenocortical cancer may also be called adrenal cortical carcinoma.

# Anal Cancer

The anus is part of the body’s digestive system and is the last part of the large intestine. Stool (solid waste) leaves the body through the anus.

The most common type of anal cancer is squamous cell carcinoma. Squamous cell carcinoma begins in flat cells lining the anal canal.

The number of cases of anal cancer diagnosed each year has been increasing over the last 10 years. Infection with human papillomavirus (HPV) is a major risk factor for anal cancer.Being vaccinated against HPV lowers the risk of anal cancer.

# Bladder Cancer

The bladder is a hollow organ in the lower part of the abdomen that stores urine until it is passed out of the body.

The most common type of bladder cancer is transitional cell carcinoma, which begins in urothelial cells that line the inside of the bladder. Urothelial cells are transitional cells, which are able to change shape and stretch when the bladder is full. This type of cancer is also called urothelial carcinoma. Other types of bladder cancer include squamous cell carcinoma (cancer that begins in thin, flat cells lining the bladder) and adenocarcinoma (cancer that begins in cells that make and release mucus and other fluids).

People who smoke have an increased risk of bladder cancer. Being exposed to certain chemicals and having chronic bladder infections can also increase the risk of bladder cancer.

The most common sign of bladder cancer is blood in the urine. Bladder cancer is often diagnosed at an early stage, when the cancer is easier to treat.

# Cervical Cancer Bullets

The cervix is the lower, narrow end of the uterus (the organ where a fetus grows). The cervix leads from the uterus to the vagina (birth canal).

The main types of cervical cancer are squamous cell carcinoma and adenocarcinoma. Squamous cell carcinoma begins in the thin, flat cells that line the cervix. Adenocarcinoma begins in cervical cells that make mucus and other fluids.

Long-lasting infections with certain types of human papillomavirus (HPV) cause almost all cases of cervical cancer. Vaccines that protect against infection with these types of HPV can greatly reduce the risk of cervical cancer. Having a Pap test to check for abnormal cells in the cervix or a test to check for HPV can find cells that may become cervical cancer. These cells can be treated before cancer forms.

Cervical cancer can usually be cured if it is found and treated in the early stages.

# Colorectal Cancer

Colorectal cancer is cancer that starts in the colon or rectum. The colon and the rectum are parts of the large intestine, which is the lower part of the body’s digestive system. During digestion, food moves through the stomach and small intestine into the colon. The colon absorbs water and nutrients from the food and stores waste matter (stool). Stool moves from the colon into the rectum before it leaves the body.

Most colorectal cancers are adenocarcinomas (cancers that begin in cells that make and release mucus and other fluids). Colorectal cancer often begins as a growth called a polyp, which may form on the inner wall of the colon or rectum. Some polyps become cancer over time. Finding and removing polyps can prevent colorectal cancer.

Colorectal cancer is the third most common type of cancer in men and women in the United States. Deaths from colorectal cancer have decreased with the use of colonoscopies and fecal occult blood tests, which check for blood in the stool.

# Esophageal Cancer

Esophageal cancer is a disease in which malignant (cancer) cells form in the tissues of the esophagus. The esophagus is a muscular tube that moves food and liquids from the throat to the stomach.

The most common types of esophageal cancer are squamous cell carcinoma and adenocarcinoma. Squamous cell carcinoma begins in flat cells lining the esophagus. Adenocarcinoma begins in cells that make and release mucus and other fluids.

Smoking and heavy alcohol use increase the risk of esophageal squamous cell carcinoma. Gastroesophageal reflux disease and Barrett esophagus may increase the risk of esophageal adenocarcinoma.

Esophageal cancer is often diagnosed at an advanced stage because there are no early signs or symptoms.

# Extracranial Germ Cell Tumor (Childhood) Bullets

A germ cell is a type of cell that forms as a fetus develops. These cells later become sperm in the testicles or eggs in the ovaries. Sometimes, germ cells may develop into a germ cell tumor in other parts of the body, either before or after birth.

An extracranial germ cell tumor is a germ cell tumor that forms in parts of the body other than the brain, such as the gonads (testicles and ovaries), chest, abdomen, or tailbone. Extracranial germ cell tumors are most common in teenagers 15 to 19 years of age.

There are three types of extracranial germ cell tumors. The most common type is mature teratoma, a benign tumor that is not likely to become cancer. Other types are immature teratomas (which may become cancer) and malignant germ cell tumors (cancer).

Extracranial germ cell tumors in children, especially ovarian germ cell tumors or testicular cancer, can usually be cured.

# Extragonadal Germ Cell Tumor Bullets

A germ cell is a type of cell that forms as a fetus develops. These cells later become sperm in the testicles or eggs in the ovaries. Sometimes, germ cells may develop into a germ cell tumor in other parts of the body, either before or after birth.

Extragonadal germ cell tumors form in parts of the body other than the gonads (testicles and ovaries). They may begin to grow anywhere in the body, but usually form in the pineal gland in the brain, the chest, the lower part of the spine, or the abdomen.

Extragonadal germ cell tumors can be benign (noncancer) or malignant (cancer). Benign extragonadal germ cell tumors are called benign teratomas. These are more common than malignant extragonadal germ cell tumors and often are very large. The two types of malignant extragonadal germ cell tumors are nonseminomas and seminomas. Nonseminomas tend to grow and spread more quickly than seminomas. Nonseminomas are usually large and cause signs and symptoms.

# Gallbladder Cancer

The gallbladder lies just under the liver in the upper abdomen. The gallbladder stores bile, a fluid made by the liver that helps digest fat.

Almost all gallbladder cancers are adenocarcinomas (cancers that begin in cells that make and release mucus and other fluids).

Gallbladder cancer is hard to diagnose in the early stages because there are no signs or symptoms. Gallbladder cancer may be found when the gallbladder is checked for gallstones or removed.

# Gastric (Stomach) Cancer

Gastric (stomach) cancer is a disease in which malignant (cancer) cells form in the lining of the stomach. The stomach is in the upper abdomen and helps digest food.

Almost all gastric cancers are adenocarcinomas (cancers that begin in cells that make and release mucus and other fluids). Other types of gastric cancer are gastrointestinal carcinoid tumors, gastrointestinal stromal tumors, and lymphomas.

Infection with bacteria called *H. pylori* is a common cause of gastric cancer.

Gastric cancer is often diagnosed at an advanced stage because there are no early signs or symptoms.

# Gestational Trophoblastic Disease Bullets

Gestational trophoblastic disease (GTD) is a term for a group of rare tumors that form in the tissue that surrounds an egg after it is fertilized. This tissue is made of trophoblast cells, which connect the fertilized egg to the wall of the uterus and form part of the placenta. In GTD, a tumor forms instead of a healthy fetus.

The two main types of GTD are hydatidiform moles and gestational trophoblastic neoplasia. Hydatidiform moles are also called molar pregnancies and are more common. Most hydatidiform moles are benign (not cancer), but they sometimes become cancer. Gestational trophoblastic neoplasia is almost always malignant (cancer). There are different types of gestational trophoblastic neoplasia, including invasive moles, choriocarcinomas, placental-site trophoblastic tumors, and epithelioid trophoblastic tumors.

GTD may not cause early signs and symptoms and may seem to be a normal pregnancy. Later signs of GTD include abnormal vaginal bleeding and a uterus that is larger than normal. GTD is usually found early during routine pregnancy care, and most of the time can be cured.

# GI Carcinoid Tumors

A gastrointestinal (GI) carcinoid tumor is a slow-growing tumor that forms in the neuroendocrine cells in the GI tract. The GI tract includes the stomach, small intestine, colon, rectum, appendix, and other organs. Most GI carcinoid tumors form in the rectum, small intestine, or appendix.

GI carcinoid tumors are a type of neuroendocrine tumor. Neuroendocrine cells release hormones into the blood when they receive a signal from the nervous system. The type of hormone released depends on where the tumor is found in the GI tract.

People who have a family history of multiple endocrine neoplasia type 1 (MEN1) syndrome or neurofibromatosis type 1 (NF1) syndrome have a higher risk of GI carcinoid tumors.

GI carcinoid tumors may be benign or malignant.

# Intraocular Melanoma

Intraocular melanoma is a rare disease in which cancer forms in melanocytes in the eye. Melanocytes are cells that make melanin (the pigment that gives skin and eyes their color).

Intraocular melanoma begins in the uvea. The uvea has three parts. The iris is the colored area at the front of the eye. The ciliary body is a ring of muscle tissue that changes the size of the pupil and the shape of the lens. The choroid is a layer of blood vessels that brings oxygen and nutrients to the eye. Most intraocular melanomas begin in the choroid.

There may be no early signs or symptoms of intraocular melanoma. It is sometimes found during an eye exam.

Risk factors for intraocular melanoma include having fair skin that freckles and burns easily, does not tan, or tans poorly and having blue, green, or other light-colored eyes.

# Kidney Cancer (Includes Renal Cell, Transitional Cell of the Renal Pelvis, and Wilms)

There are two kidneys, one on each side of the spine, above the waist. The kidneys clean the blood to take out waste and make urine. Urine collects in the renal pelvis, the area at the center of the kidney, and then passes through the ureter, into the bladder, and out of the body. The kidneys also make hormones that help control blood pressure and signal the bone marrow to make red blood cells when needed.

There are three main types of kidney cancer. Renal cell cancer is the most common type in adults and Wilms tumors are the most common in children. These types form in the tissues of the kidney that make urine. Transitional cell cancer forms in the renal pelvis and ureter in adults.

Smoking and taking certain pain medicines for a long time can increase the risk of adult kidney cancer. Certain inherited disorders can increase the risk of kidney cancer in children and adults. These include von Hippel-Lindau syndrome, hereditary leiomyomatosis and renal cell cancer, Birt-Hogg-Dubé syndrome, and hereditary papillary renal cancer.

Kidney cancer is often diagnosed at an advanced stage because usually there are no early signs or symptoms.

Kidney tumors may be benign or malignant.

# Liver and Bile Duct Cancer

The liver has many important functions in the body. For example, it cleans toxins from the blood, makes bile that helps digest fat, makes substances that help blood clot, and makes, stores, and releases sugar for energy.

Primary liver cancer is cancer that starts in the liver. The most common type of primary liver cancer is hepatocellular carcinoma, which occurs in the tissue of the liver. When cancer starts in other parts of the body and spreads to the liver, it is called liver metastasis.

Liver cancer is rare in children and teenagers, but there are two types of liver cancer that can form in children. Hepatoblastoma occurs in younger children, and hepatocellular carcinoma occurs in older children and teenagers.

The bile ducts are tubes that carry bile between the liver and gallbladder and the intestine. Bile duct cancer is also called cholangiocarcinoma. When it begins in the bile ducts inside the liver, it is called intrahepatic cholangiocarcinoma. When it begins in the bile ducts outside the liver, it is called extrahepatic cholangiocarcinoma. Extrahepatic cholangiocarcinoma is much more common than intrahepatic cholangiocarcinoma.

# Pancreatic Cancer

The pancreas lies behind the stomach and in front of the spine. There are two kinds of cells in the pancreas. Exocrine pancreas cells make enzymes that are released into the small intestine to help the body digest food. Neuroendocrine pancreas cells (such as islet cells) make several hormones, including insulin and glucagon, that help control sugar levels in the blood.

Most pancreatic cancers form in exocrine cells. These tumors do not secrete hormones and do not cause signs or symptoms. This makes it hard to diagnose this type of pancreatic cancer early. For most patients with exocrine pancreatic cancer, current treatments do not cure the cancer.

Some types of malignant pancreatic neuroendocrine tumors, such as islet cell tumors, have a better prognosis than pancreatic exocrine cancers.

# Parathyroid Cancer Bullets

The parathyroid glands are four tiny glands in the neck near the thyroid gland.The parathyroid glands make parathyroid hormone (PTH), which helps the body use calcium and keeps the amount of calcium in the blood at normal levels.

Tumors in the parathyroid are usually benign (not cancer). These are called adenomas. Fewer than 100 people a year are diagnosed with parathyroid cancer in the United States.

Having certain inherited disorders can increase the risk of parathyroid cancer. These include familial isolated hyperparathyroidism (FIHP) and multiple endocrine neoplasia type 1 (MEN1) syndrome. Having radiation therapy to the neck can increase the risk of benign parathyroid tumors.

With either a benign tumor or cancer, the gland may make too much PTH. This causes hypercalcemia (too much calcium in the blood), which is a serious and life-threatening condition. There may be no signs or symptoms of a parathyroid tumor until there is too much calcium in the blood. Signs and symptoms include weakness and feeling tired. Larger parathyroid tumors may cause a lump in the neck near the thyroid.

# Penile Cancer Bullets

The penis is the male sex organ that passes sperm and urine from the body. The glans (head of the penis) is covered with loose skin called the foreskin.

The most common type of penile cancer is squamous cell carcinoma (cancer that begins in flat cells in the top layer of the skin). It usually forms on or under the foreskin. Signs of penile cancer include sores or other skin changes, discharge, and bleeding.

Infection with certain types of human papillomavirus (HPV) causes about one-third of penile cancer cases. Circumcision (removal of the foreskin) may help prevent infection with HPV and decrease the risk of penile cancer. When found early, penile cancer can usually be cured.

# Pheochromocytoma/ Paraganglioma

Pheochromocytoma and paraganglioma are rare tumors that form from neuroendocrine cells. Neuroendocrine cells release hormones into the blood when they receive a signal from the nervous system. Neuroendocrine cells are found all through the body.

Paragangliomas usually form near the carotid artery and along nerve pathways in the head, neck, and spine. Pheochromocytomas form in the adrenal medulla (the center of the adrenal gland found on top of each kidney).

Pheochromocytomas and some paragangliomas release the hormones adrenaline and noradrenaline into the blood. This may cause symptoms such as high blood pressure, pounding headaches, flushing, and heart palpitations.

Certain inherited disorders increase the risk of pheochromocytoma or paraganglioma. These include multiple endocrine neoplasia 2 syndrome, types A and B , von Hippel-Lindau syndrome, and neurofibromatosis type 1.

Pheochromocytomas and paragangliomas may be benign or malignant.

# Prostate Cancer Bullets

The prostate gland makes fluid that forms part of semen. The prostate lies just below the bladder in front of the rectum. It surrounds the urethra (the tube that carries urine and semen through the penis and out of the body).

Prostate cancer is the most common cancer in men in the United States, after skin cancer. It is the second leading cause of death from cancer in men. Prostate cancer occurs more often in African-American men than in white men. African-American men with prostate cancer are more likely to die from the disease than white men with prostate cancer.

Almost all prostate cancers are adenocarcinomas (cancers that begin in cells that make and release mucus and other fluids). Prostate cancer often has no early symptoms. Advanced prostate cancer can cause men to urinate more often or have a weaker flow of urine, but these symptoms can also be caused by benign prostate conditions.

Prostate cancer usually grows very slowly. Most men with prostate cancer are older than 65 years and do not die from the disease. Finding and treating prostate cancer before symptoms occur may not improve health or help you live longer. Talk to your doctor about your risk of prostate cancer and whether you need screening tests.

# Skin Cancer

The skin protects against heat, sunlight, injury, and infection. Skin also helps control body temperature and stores water and fat. Skin cancer is the most common type of cancer. It usually forms in skin that has been exposed to sunlight, but can occur anywhere on the body.

Skin has several layers. Skin cancer begins in the epidermis (outer layer), which is made up of squamous cells, basal cells, and melanocytes.

There are several different types of skin cancer. Squamous cell and basal cell skin cancers are sometimes called nonmelanoma skin cancers. Nonmelanoma skin cancer usually responds to treatment and rarely spreads to other parts of the body. Melanoma is more aggressive than most other types of skin cancer. If it isn’t diagnosed early, it is likely to invade nearby tissues and spread to other parts of the body. The number of cases of melanoma is increasing each year. Only 2 percent of all skin cancers are melanoma, but it causes most deaths from skin cancer.

Rare types of skin cancer include Merkel cell carcinoma, skin lymphoma, and Kaposi sarcoma.

# Small Intestine Cancer Bullets

The small intestine (also called small bowel) is part of the body’s digestive system. It is a long, coiled tube that connects the stomach to the large intestine. The small intestine receives food from the stomach, helps break it down, and absorbs nutrients that are used by the body. The three parts of the small intestine are the duodenum, jejunum, and ileum. The duodenum connects to the stomach, and the ileum connects to the colon.

Small intestine cancer often starts in the duodenum. The most common type of small intestine cancer is adenocarcinoma (cancer that begins in cells that make and release mucus and other fluids). Other types of small intestine cancer are sarcomas, carcinoid tumors, gastrointestinal stromal tumors, and lymphomas.

# Testicular Cancer Bullets

The testicles are two glands inside the scrotum (a sac of loose skin below the penis). The testicles make sperm and the hormone testosterone.

Testicular cancer is the most common cancer in men 15-34 years of age. The two main types of testicular tumors are seminoma and nonseminoma. Nonseminomas tend to grow and spread more quickly than seminomas.

The most common sign of testicular cancer is a lump or swelling in the testicle. Most testicular cancers can be cured, even if they are diagnosed at an advanced stage.

Treatment for testicular cancer can cause infertility by decreasing the amount of sperm made by the body. Men who want to have children may want to use sperm banking to store sperm before they begin treatment.

# Thyroid Cancer

The thyroid is a gland at the base of the throat near the windpipe. It is shaped like a butterfly, with a right lobe and a left lobe. A thin piece of tissue connects the two lobes. The thyroid makes hormones that help control heart rate, blood pressure, body temperature, and weight.

There are four types of thyroid cancer. These are papillary, follicular, medullary, and anaplastic thyroid cancer. Papillary is the most common type of thyroid cancer.

Anaplastic thyroid cancer is hard to cure with current treatment. Other types of thyroid cancer can usually be cured.

Being exposed to [radiation](http://www.cancer.gov/Common/PopUps/popDefinition.aspx?id=45072&version=Patient&language=English) to the head and neck as a child increases the risk of thyroid cancer. Having certain [genetic](http://www.cancer.gov/Common/PopUps/popDefinition.aspx?id=46391&version=Patient&language=English) [conditions](http://www.cancer.gov/Common/PopUps/popDefinition.aspx?id=651193&version=Patient&language=English) such as [familial medullary thyroid cancer](http://www.cancer.gov/Common/PopUps/popDefinition.aspx?id=563950&version=Patient&language=English), [multiple endocrine neoplasia type 2A syndrome](http://www.cancer.gov/Common/PopUps/popDefinition.aspx?id=702095&version=Patient&language=English), and [multiple endocrine neoplasia type 2B syndrome](http://www.cancer.gov/Common/PopUps/popDefinition.aspx?id=702100&version=Patient&language=English) can also increase the risk of thyroid cancer.

# Urethral Cancer Bullets

The urethra is a tube that carries urine from the bladder to the outside of the body. In women, the urethra is about 1½ inches long and is just above the vagina. In men, the urethra is about 8 inches long. It goes through the prostate gland and the penis to the outside of the body. In men, the urethra also carries semen.

Urethral cancer is a rare cancer that occurs more often in men than in women. There are three types of urethral cancer. Squamous cell carcinoma is the most common type. It forms in the flat cells that line the urethra. Transitional cell carcinoma forms in cells near the urethral opening in women and in the part of the urethra that goes through the prostate gland in men. These cells change shape and stretch as urine passes out of the body. Adenocarcinoma forms in the glands near the urethra. These glands make and release mucus and other fluids.

Urethral cancer can metastasize (spread) quickly to tissues around the urethra and has often spread to nearby lymph nodes by the time it is diagnosed. Signs of urethral cancer include bleeding or trouble urinating.

# Uterine Cancer Bullets

The uterus is a hollow, muscular organ where a fetus grows. Uterine cancer can start in different parts of the uterus. Most uterine cancers start in the endometrium (the inner lining of the uterus). This is called endometrial cancer. Most endometrial cancers are adenocarcinomas (cancers that begin in cells that make mucus and other fluids).

Uterine sarcoma is an uncommon form of uterine cancer that forms in the muscle and tissue that support the uterus.

Obesity, certain inherited conditions, and taking estrogen alone (without progesterone) can increase the risk of endometrial cancer. Radiation therapy to the pelvis can increase the risk of uterine sarcoma. Taking tamoxifen for breast cancer can increase the risk of both endometrial cancer and uterine sarcoma.

The most common sign of endometrial cancer is unusual vaginal bleeding. Endometrial cancer can usually be cured. Uterine sarcoma is harder to cure.

# Vaginal Cancer Bullets

The vagina (birth canal) leads from the cervix (the opening of the uterus) to the outside of the body.

The most common type of vaginal cancer is squamous cell carcinoma, which begins in the thin, flat cells that line the vagina. Other types of vaginal cancer are adenocarcinoma (cancer that begins in cells that make mucus and other fluids), melanoma, and sarcoma.

Infection with certain types of human papillomavirus (HPV) causes most vaginal cancer. Vaccines that protect against infection with these types of HPV may reduce the risk of vaginal cancer.

Vaginal cancer often does not cause early [signs](http://www.cancer.gov/Common/PopUps/popDefinition.aspx?id=750109&version=Patient&language=English) or [symptoms](http://www.cancer.gov/Common/PopUps/popDefinition.aspx?id=45022&version=Patient&language=English). It may be found during a routine [pelvic exam](http://www.cancer.gov/Common/PopUps/popDefinition.aspx?id=322873&version=Patient&language=English). When found early, vaginal cancer can often be [cured](http://www.cancer.gov/Common/PopUps/popDefinition.aspx?id=318813&version=Patient&language=English).

# VULVAR CANCER BULLETS

The vulva is the external part of the female genitals, including the clitoris, the vaginal lips, the opening to the vagina, and the surrounding skin and tissue.

Most vulvar cancers are squamous cell carcinoma. This type of cancer begins in squamous cells (thin, flat skin cells) and is usually found on the vaginal lips.

A small number of vulvar cancers are adenocarcinomas (or change cancers and begin to singular form) (cancers that begin in cells that make mucus and other fluids). This type of cancer is usually found on the sides of the vaginal opening.

Vulvar cancer usually forms slowly over a number of years. Abnormal cells can grow on the surface of the vulvar skin for a long time. This condition is called vulvar intraepithelial neoplasia (VIN). Because it is possible for VIN to become vulvar cancer, it is important to get treatment. Signs and symptoms of vulvar cancer include a lump, bleeding, or itching.

Infection with certain types of human papillomavirus (HPV) causes about half of all vulvar cancers. Vaccines that protect against infection with these types of HPV may reduce the risk of vulvar cancer.

# Lymphoma

Lymphoma is cancer that begins in cells of the lymph system. The lymph system is part of the immune system, which helps the body fight infection and disease. Because lymph tissue is found all through the body, lymphoma can begin almost anywhere.

The two main types of lymphoma are Hodgkin lymphoma and non-Hodgkin lymphoma (NHL). These can occur in both children and adults.

Most people with Hodgkin lymphoma have the classic type. With this type, there are large, abnormal lymphocytes (a type of white blood cell) in the lymph nodes called Reed-Sternberg cells. Hodgkin lymphoma can usually be cured.

There are many different types of NHL that form from different types of white blood cells (B-cells, T-cells, NK cells). Most types of NHL form from B-cells. NHL may be indolent (slow-growing) or aggressive (fast-growing). The most common types of NHL in adults are diffuse large B-cell lymphoma, which is usually aggressive, and follicular lymphoma, which is usually indolent.

Mycosis fungoides and the Sézary syndrome are types of NHL that start in white blood cells in the skin. Primary central nervous system lymphoma is a rare type of NHL that starts in white blood cells in the brain, spinal cord, or eye.

The treatment and the chance of a cure depend on the stage and the type of lymphoma.

# Multiple Myeloma and Other Plasma Cell Neoplasms

Plasma cells are cells in the immune system that make antibodies, which help the body fight infection and disease. Plasma cell neoplasms are diseases in which the body makes too many plasma cells in the bone marrow and these cells are abnormal. The abnormal plasma cells make M proteins, which are abnormal antibodies that build up in the bone marrow and can cause the blood to thicken or damage the kidneys.

The abnormal plasma cells can also form tumors in the bone or soft tissue. When there is only one tumor, the disease is called a plasmacytoma. When there is more than one tumor, the disease is called multiple myeloma. Both are malignant (cancer).

Multiple myeloma may not cause signs or symptoms for a long time and is often not found until it is advanced. Myeloma tumors can weaken the bone, cause too much calcium in the blood, and damage the kidneys and other organs. Bone pain is a common symptom of advanced multiple myeloma. Other signs and symptoms include frequent infections, anemia, bleeding, numbness or tingling, and weakness.

One type of benign (not cancer) plasma cell neoplasm is called monoclonal gammopathy of undetermined significance (MGUS). In MGUS, there are low levels of M protein and there are no symptoms or damage to the body. In rare cases, MGUS can become multiple myeloma.

# Myeloproliferative Neoplasms and Myelodysplastic Syndromes (Option 2)

Myeloproliferative neoplasms and myelodysplastic syndromes are diseases of the blood cells. They include chronic myeloproliferative neoplasms, myelodysplastic syndromes, and myelodysplastic/myeloproliferative neoplasms.

Chronic myeloproliferative neoplasms are diseases in which the bone marrow makes too many red blood cells, platelets, or certain white blood cells.

Myelodysplastic syndromes are a group of cancers in which immature blood cells in the bone marrow do not mature or become healthy blood cells.

Myelodysplastic/myeloproliferative neoplasms are diseases that have features of both myelodysplastic syndromes and myeloproliferative neoplasms.

Certain types of myeloproliferative neoplasms and myelodysplastic syndromes may become a type of blood cancer called acute leukemia.

# Neuroblastoma

Neuroblastoma is a disease in which malignant (cancer) cells form in certain types of nerve tissue. Neuroblastoma most often begins in the adrenal glands, which are on top of the [kidney](http://www.cancer.gov/Common/PopUps/popDefinition.aspx?id=46325&version=Patient&language=English)s. It can also form in nerve tissue in the neck, chest, abdomen, or spine.

Neuroblastoma most often occurs in children younger than 5 years of age. Sometimes it forms before birth and is found during a [routine](http://www.cancer.gov/Common/PopUps/popDefinition.aspx?id=46400&version=Patient&language=English) pregnancy [ultrasound](http://www.cancer.gov/Common/PopUps/popDefinition.aspx?id=46157&version=Patient&language=English). In children aged 6 months or younger, the disease sometimes goes away without treatment.

Neuroblastoma is usually found when the tumor begins to grow and cause signs or symptoms. By the time it is diagnosed, the [cancer](http://www.cancer.gov/Common/PopUps/popDefinition.aspx?id=45333&version=Patient&language=English) has usually metastasized (spread to other parts of the body).

# Pituitary Tumor

The pituitary gland is a pea-sized [gland](http://www.cancer.gov/Common/PopUps/popDefinition.aspx?id=257523&version=Patient&language=English) at the base of the brain, just above the back of the nose. It makes different [hormones](http://www.cancer.gov/Common/PopUps/popDefinition.aspx?id=45713&version=Patient&language=English) that affect the way many parts of the body work.

Most pituitary tumors are benign (not cancer), and are called pituitary adenomas. These tumors grow very slowly. They do not spread from the pituitary gland to distant parts of the body, but they sometimes spread to the bones of the skull or sinus cavity near the pituitary gland. A very small number of pituitary tumors are malignant (cancer) and can spread to distant parts of the body.

Most pituitary tumors make more hormones than normal pituitary cells. The extra hormones may cause signs or symptoms of disease. The signs and symptoms depend on which hormone is being made.

A family history of multiple endocrine neoplasia type 1 (MEN1) syndrome, Carney complex, or isolated familial [acromegaly](http://www.cancer.gov/Common/PopUps/popDefinition.aspx?id=476630&version=Patient&language=English) increases the risk of pituitary tumors.

# Langerhans Cell Histiocytosis

Langerhans cell histiocytosis (LCH) is a rare cancer that begins in LCH cells, a type of dendritic cell (white blood cell). LCH cells can grow in many different parts of the body, where they can damage tissue or form lesions.

LCH may occur at any age but is most common in young children. In infants up to one year of age, LCH may go away without treatment. Treatment of LCH in children is different from treatment of LCH in adults.

LCH in the skin, bones, lymph nodes, or pituitary gland usually gets better with treatment and is called "low-risk." LCH in the spleen, liver, or bone marrow is harder to treat and is called "high-risk."