

Chapter 1 : Adrenal and Pituitary Disorders

The adrenal glands, located on the top of each kidney, are responsible for releasing different hormones. Adrenal gland disorders occur when the adrenal glands produce too much or too little of these hormones. Women may also have increased growth of hair on their face and body and experience.

These supplements primarily contain the hormone hydrocortisone. The supplements are available both as capsules and as injections. Along with the benefits of these supplements, their numerous side effects can cause serious risks to human health in cases of overdosing. Let us discuss the use and side effects of these extracts and supplements. Depletion of adrenal reserves in the body due to a poor lifestyle or chronic stress may lead to ill health and adrenal fatigue. This fatigue may be accompanied by symptoms of dizziness, tiredness, headaches, memory issues, fainting, and depression. If the adrenal glands fail completely due to fatigue, this crisis is an emergency requiring medical treatment. However, for suboptimal hormonal reserves caused due to fatigue, ACE supplements may be taken as capsules or as injections. However, a healthy lifestyle must be maintained along with the adrenal cortical extract supplements for long-term treatment of fatigue or any symptoms of adrenal fatigue. Treatment for adrenal fatigue varies according to the symptoms and condition of each patient. Accordingly, health experts prescribe proper dosage of these supplements. These supplements, in conjunction with other dietary supplements like vitamin C, vitamin B complex, and L-tyrosine etc. They are used for lowering blood pressure and for treating some autoimmune disorders. Side Effects of These Hormonal Extracts ACE supplements treat fatigue and various symptoms of exhaustion along with many other health conditions. Nevertheless, overdosing can cause some potential side effects. They are hazardous for pregnant women, with miscarriage being among the possible side effects. There are higher chances of significant side effects in people with any allergy or hypersensitivity to these extracts. Among other side effects, ACE extract supplements can cause the appearance of bacterial infection when taken as injections. This is one of the most serious side effects. It is advisable to seek expert advice before determining whether these extracts and supplements are right for you and whether they may cause any side effects.

Chapter 2 : About adrenal cortical cancer | Adrenal gland cancer | Cancer Research UK

Adrenal Gland Diseases InsightMG T+ Below you'll find information about various types of adrenal gland diseases. If you have a question not addressed here, please contact us and we will get back to you as soon as possible.

The adrenal glands are triangular shaped and measure about one-half inch in height and 3 inches in length. Each gland consists of a medulla the center of the gland which is surrounded by the cortex. The medulla is responsible for producing epinephrine and norepinephrine adrenaline. The adrenal cortex produces other hormones necessary for fluid and electrolyte salt balance in the body such as cortisone and aldosterone. The adrenal cortex also makes sex hormones but this only becomes important if overproduction is present.

Indications for Surgical Removal of Adrenal Glands The indications for surgical removal of the adrenal gland are relatively straightforward and include, but are not limited to the following: Tumors of the adrenal cortex which overproduce hormones. One such tumor is shown in the picture This picture is blown up about 2-fold to make it easier to see. The normal adrenal gland is NOT this big. Endocrine glands are very important despite their small size since they make important hormones. Tumors of the adrenal medulla which overproduce adrenaline pheochromocytoma. Primary cancers of the adrenal. Any size adrenal mass which causes symptoms such as flank pain or tenderness. The remainder of the adrenal section of this large endocrine disorders site is arranged in small segments to make topics easier to understand. Specific hormones are discussed on pages which illustrate the typical treatment of that disorder. Illustrations and actual patient x-rays are used extensively. If you get lost, or want to see what else is discussed, go to our Home Page. Five Specific Operations for adrenal tumors [includes reasons why one approach may be better than another] X-Ray Tests to evaluate adrenal masses and tumors More on Pheochromocytomas go here first as the " Ten Percent Tumor " Diseases of the Adrenal Cortex: Cushings Syndrome from cortisol overproduction Diseases of the Adrenal Cortex: Cohns Syndrome from aldosterone overproduction coming soon!

Chapter 3 : Dr. Rachel Marie A Cazeau - Orlando FL, Pediatric Medicine

Adrenal gland disorders are problems that arise in one or both adrenal glands. These are a set of paired organs located on the top of each kidney. The adrenal glands are responsible for making several hormones and catecholamines (i.e., adrenaline).

The source of "adrenalin" epinephrine, also norepinephrine. At autopsy it is gray, unless it has autolyzed. The old name "adrenal capsules", from the pre-refrigeration era, reflects the fact that the medulla had usually liquified by the time the anatomists and pathologists got to it. The only bona-fide diseases are two tumors that may arise here or at the other chromaffin tissue masses -- pheochromocytoma well-differentiated, adults and neuroblastoma poorly-differentiated, children. This tumor is named for its colorful reaction in fixatives containing chromic acid salts. Even a tiny 1 gm benign pheochromocytoma can make a person very sick and will eventually cause death. Today, "pheochromocytoma" is defined to arise in the adrenal medulla. Similar tumors less common arising elsewhere are called "extra-adrenal paragangliomas. Pheo patients need to be screened for germline mutations, and if positive, their family members need to be screened as well J. Pre-natal diagnosis is available for these tumor-gene syndromes. Same locus, different allele Nature , see above. Microscopically, pheos resemble adrenal medulla. For pheos, the traditional teaching has long been that there are no histologic criteria for malignancy, not even vascular invasion. Tumors with scores of four or less all proved to act benign; those with higher scores were unpredictable. Watch for more of this Am. To prove malignancy you must find pheo in a location where it could not have arisen. You can see them in most normal medullas if you look hard enough. They must be thanatosomes. They are acid-fast and autofluorescent! This is a helpful study that pathologists can perform immediately on retrieval of the tumor. Regardless of location and appearance, the patients will report anxiety, headache, palpitations, "panic attacks", sweating, dizziness, etc. Again, you may suspect the basic problem is emotional. Actually, the majority show sustained high blood pressure. Pheos are still often missed clinically Am. The patients typically had been told they had "benign essential hypertension" and "emotional problems". In addition to causing bad high blood pressure and all that goes with it, high levels of circulating catecholamines can directly and likely permanently, as with cocaine damage the myocardium can cause coronary spasm, and can play havoc with smooth muscle renal arteries, bowel, brain, etc. Screening tests for pheos detect increased amounts of catecholamines or their metabolites in blood or urine. The classic screen for pheos 24 hour urinary vanillylmandelic acid -- VMA is being superseded by more sensitive and specific tests. Today, the 6-[18F]fluorodopamine PET scan seems to be preferred for spotting metastatic pheochromocytoma. Treatment is surgical, with very careful management of fluid status and blood pressure before and after surgery J. The anesthesiologist, of course, has an extra challenge Anesth. And surgeons must be careful manipulating the tumor! Adrenal sparing surgery, i.

Adrenal Gland Physiology. The adrenal cortex consists of three distinct zones, the glomerulosa, the fasciculata, and the reticularis. The fasciculata is the principal component of the hypothalamic-pituitary-adrenal axis.

Thyroid Conditions Involving Hormone Production Latest Awards Endocrinologists can detect, evaluate and treat conditions related to the adrenal glands or pituitary glands. This requires unique training and experience, in part because symptoms of such conditions can be so diverse and disseminated that they often resemble those attributed to stress, diet, aging and other factors. While not considered common, these endocrine conditions are nevertheless underdiagnosed, and they have profound effects on an individual who suffers from them: Adrenal and pituitary expertise is a complex, inter-related area of knowledge that is the special domain of the endocrinologist. Adrenal Disorders Adrenal glands produce hormones the help the body control sugar, burn protein and fat and react to stressors. These hormones have a very long list of vital effects, including on the immune system, on insulin function and on dietary metabolism. Kidneys of patients with this condition may not be able to regulate salt and water balance. Blood tests, including for cortisol levels, help to reveal the disease. This chronic condition can be safely treated with daily dosing of replacement hormones—a therapy that must be carefully managed by the endocrinologist. Elevated production by the adrenals of cortisol over an extended period of time can cause obesity and other physical changes, as well as well changes in strength, energy and metabolism. Pituitary tumors often cause the condition. Overproduction by the adrenals of aldosterone results in water build-up and increase in blood pressure. Medications to block the effects of aldosterone, and lifestyle changes, can effectively treat this condition. Pituitary Disorders A tiny gland situated below the brain in the skull base, the pituitary produces a list of important hormones that help to control and set off a cascade of additional, essential endocrine effects in the body. Pituitary hormones are thus very important to endocrine function and health. These abnormalities are not cancers but are overgrowths. They can cause a number of conditions related to excess secretion of pituitary hormones, which in turn is responsible for most cases of overproduction of other hormones in the body. But comparison, non-endocrine tumors nonsecretory pituitary gland tumors proximal to the pituitary can be problematic because they may compress and decrease the function of the gland. Pituitary tumors can cause other effects due to pressure against other areas of the brain, as well. These conditions need highly knowledgeable and subspecialized care, often involving neurosurgery. Pituitary failure or hypopituitarism. Underproduction of pituitary hormones can also result in a broad array of anatomical, physiologic and metabolic symptoms. Treatment is with supplementation of synthetic or recombinant hormones, according to the specific hormones that are deficient, in order to correct these hormone levels. Endocrinologists use blood testing, medical history and symptoms to confirm these problems. They can provide or coordinate the necessary care to treat these conditions. Healthtalk Online Sign up now to be added to our e-mail list to get breaking health information and other updates from us.

The primary NIH organization for research on Adrenal Gland Disorders is the National Institute of Diabetes and Digestive and Kidney Diseases Disclaimers MedlinePlus links to health information from the National Institutes of Health and other federal government agencies.

Other endocrine glands are the pancreas, the pituitary, the adrenal glands and the parathyroid glands. The thyroid gland is located in the middle of the lower neck, below the larynx voice box and wraps around the front half of the trachea windpipe. It is shaped like a bow tie, just above the collarbones, having two halves lobes which are joined by a small tissue bar isthmus. What is a thyroid disorder? Diseases of the thyroid gland are very common, affecting millions of Americans. The most common thyroid problems are: An overactive gland, called hyperthyroidism e. Patients with a family history or who had radiation therapy to the head or neck as children for acne, adenoids, or other reasons are more prone to develop thyroid malignancy. If you develop significant swelling in your neck or difficulty breathing or swallowing, you should call your surgeon or be seen in the emergency room. What treatment may be recommended? Depending on the nature of your condition, treatment may include the following: Thyroid hormone replacement pills Hyperthyroidism treatment: Medication to block the effects of excessive production of thyroid hormone Radioactive iodine to destroy the thyroid gland Surgical removal of the thyroid gland Goiters lumps If you experience this condition, your doctor will propose a treatment plan based on the examination and your test results. A fine needle aspiration biopsyâ€”a safe, relatively painless procedure. With this procedure, a hypodermic needle is passed into the lump, often after administration of local anesthesia into the skin, and tissue fluid samples containing cells are taken. Often several passes with the needle are required. Sometimes ultrasound may be used to guide the needle into the nodule. There is little pain afterward and very few complications from the procedure occur. This test gives the doctor more information on the nature of the lump in your thyroid gland and specifically may help to differentiate a benign from a malignant thyroid mass. Thyroid surgeryâ€”may be required when: What is thyroid surgery? Thyroid surgery is an operation to remove part or all of the thyroid gland. It is performed in the hospital, and general anesthesia is usually required. Typically the operation removes the lobe of the thyroid gland containing the lump and possibly the isthmus. A frozen section an immediate microscopic reading may or may not be used to determine if the rest of the thyroid gland should be removed. This is a decision usually made in the operating room by the surgeon, based on findings at the time of surgery. Your surgeon will discuss these options with you preoperatively. There may be times when the definite microscopic answer cannot be determined until several days after surgery. If a malignancy is identified in this way, your surgeon may recommend that the remaining lobe of the thyroid be removed at a second procedure. If you have specific questions about thyroid surgery, ask your otolaryngologist and he or she will answer them in detail. What happens after thyroid surgery? During the first 24 hours: After surgery, you may have a drain a tiny piece of plastic tubing , which prevents fluid and blood from building up in the wound. This is removed after the fluid accumulation has stabilized, usually within 24 hours after surgery. Most patients are discharged later the same day or the day following the procedure. Complications are rare but may include: Bleeding A hoarse voice Difficulty swallowing Numbness of the skin on the neck Vocal cord paralysis Low blood calcium At home: Following the procedure, if it is determined that you need to take any medication, your surgeon will discuss this with you, prior to your discharge. If you experience any of the following, call your surgeon: Numbness and tingling around the lips and hands Increasing pain Fever Swelling Wound discharge If a malignancy is identified, thyroid replacement medication may be withheld for several weeks. This allows a radioactive scan to better detect any remaining microscopic thyroid tissue, or spread of malignant cells to lymph nodes or other sites in the body. How is a diagnosis made? The diagnosis of a thyroid function abnormality or a thyroid mass is made by taking a medical history and a physical examination. Specifically, your doctor will examine your neck and ask you to lift up your chin to make your thyroid gland more prominent. You may be asked to swallow during the examination, which helps to feel the thyroid and any mass in it. Other tests your doctor may order include:

Chapter 6 : Benefits and Side Effects of Adrenal Extract Supplement | blog.quintoapp.com

Most adrenal gland tumors are "abnormal growths on the adrenal glands" are not cancerous. They often do not cause symptoms or require treatment. However, adrenal gland tumors can produce a variety of different hormones, leading hormone levels to get too high.

The adrenal glands There are 2 adrenal glands, one above each kidney. Adrenal means next to the kidney. The adrenal glands are small, but very important. This page is about adrenal cortical tumours, including adrenal cortical carcinoma ACC. Go to information about pheochromocytoma Steroid hormones The adrenal cortex makes steroid hormones. The hormones may cause symptoms that affect your whole body. Cancers that spread to the adrenal glands Cancer can start to grow elsewhere in the body and spread to the adrenal glands. This is secondary cancer. For example, kidney cancer can spread to the adrenal glands. This is known as secondary cancer and would be treated as kidney cancer, not an adrenal gland cancer. Cancers that start in the adrenal cortex There are 2 main types of tumour that start in the adrenal cortex. Adenoma The most common type of tumour starting in the adrenal cortex is an adenoma. Adenomas are non cancerous benign tumours. They are often found by chance in patients having scans for other reasons. When benign tumours are found by chance doctors sometimes call them incidentalomas. They are called non functioning tumours. But some make too much of these adrenal hormones or steroid hormones. These are called functioning tumours or hormone secreting tumours. Adrenal cortical carcinomas ACC Cancers that start in the adrenal cortex are very rare. They are called adrenal cortical carcinomas ACC or primary adrenal gland cancers. Cortical means the cells of the cortex. Causes It is not known what causes most ACCs. A small number of people are born with an inherited gene change that increases their risk of developing ACC. These inherited syndromes are rare. Li Fraumeni syndrome familial adenomatous polyposis coli congenital adrenal hyperplasia Adrenal cortical cancers diagnosed in children and young adults are more likely to be linked to an inherited gene change. Symptoms You are more likely to have symptoms if your tumour makes hormones. If your tumour makes too much cortisol or aldosterone, you might have:

Chapter 7 : BOLAD ARTHRITIS and RHEUMATOLOGY CLINIC Sjogren's syndrome

The adrenal glands are two crescent-shaped glands that sit on top of each kidney and secrete hormones into the bloodstream. Diseases affecting the adrenal glands include Addison's disease and Cushing's disease.

Chapter 8 : Parathyroid Hyperplasia | Florida Hospital

If you have a disorder of the pituitary or adrenal gland, you are either making too much or not making enough of a certain hormone. A doctor trained in treating people with hormone problems, called an endocrinologist, can help diagnose and treat these disorders.

Chapter 9 : Adrenal Disorders and Treatments: hormones, tumors, cancer, and surgery options.

Most solid tumors of the adrenal gland which are greater than 4 cm (~2 inches) regardless of whether they produce hormone or not (to rule out malignancy). Primary cancers of the adrenal. Any size adrenal mass which causes symptoms such as flank pain or tenderness.