The anatomy of the female reproductive system essay

Design

Problem 5 hypertext transfer protocol: //www. betterhealth. vic. gov. au/bhcv2/bhcarticles. nsf/pages/Hormonal_ (hormone) _system? unfastened1 Briefly describe the variety meats of the hormone system

- Pituitary gland- this is located inside the encephalon and its function is to supervise the other secretory organs and guarantee that endocrine degrees are where they are supposed to be. When this secretory organ releases exciting endocrines it can do changed in the production of endocrines at another site. The pituitary secretory organ is linked to the nervous system via the hypothalamus.

  Gonadotropins (LH and FSH) , growing endocrine (GH) and thyroid exciting endocrine (TSH) are some illustrations of endocrines released by this secretory organ

- Thyroid gland- this is located in the cervix front tooth to the trachea. The thyroid endocrine (T3 and T4) are released as they are needed for metamorphosis and homeostasis of the organic structure. This secretory organ is controlled by the TSH which is made in the pituitary secretory organ via a feed-back cringle.
- Parathyroid gland- this is located alongside the thyroid secretory organ and usually exists as four secretory organs. These secretory organs serve to modulate Ca, vitamin D and phosphate.
- Adrenal glands- these are located on top of each kidney and be as two secretory organs. They produce a several assortments of endocrines. The external part of the secretory organ (adrenal cerebral mantle) creates hydrocortisone, aldosterone and sex endocrines while the center of the secretory organ (adrenal myelin) creates epinephrine.

- Pancreas- this organ is located in the digestive system inside the venters. It produces insulin which regulated the volume of sugar in the blood. It is creates endocrines such as glucagon.
- Ovaries- This is located inside the pelvic girdle of the female.

  Sex endocrines such as estrogen are created here.

- Testes- This is located inside the scrotal poke of the male. Sex endocrines such as testosterone are created here.
- Pineal Gland- this secretory organ releases melatonin which affects generative operation.
- Hypothalamus- This releases endocrines necessary for unstable balance, the contraction f smooth musculus and the ordinance of endocrine secernment by the anterior pituitary secretory organ.

2 Describe the anatomy of the hypothalamus and pituitary secretory organ and province their relationship. hypertext transfer protocol: //www. innerbody.

com/image/endoov. htmlThe hypothalamus is found superior and anterior tot eh encephalon root and inferior to the thalamus. It serves a assortment of map in the nervous system and besides regulates the hormone system via the pituitary secretory organ.

Unique cells called neurosecretory cells are found in the hypothalamus and they are nerve cells that release the undermentioned endocrines:

- Oxytocin
- Thyrotropin-releasing endocrine (TRH)

- Growth hormone-inhibiting endocrine (GHIH)
- Antidiuretic endocrine (ADH)
- Growth hormone-releasing endocrine (GHRH)
- Corticotropin-releasing endocrine (CRH)
- Gonadotropin-releasing endocrine (GnRH)

The pituitary secretory organ is rather little in size and is linked to the inferior portion of the hypothalamus. It is located in a minor depression in the sella turcica, which is a sphenoid bone. Numerous blood vass border the pituitary secretory organ in order for endocrines to go and be secreted throughout the organic structure.

The pituitary secretory organ is divided into the buttocks and anterior pituitary secretory organs. Posterior Pituitary: This is nervous tissue as it is a bantam add-on of the hypothalamus. Neurosecretory cells from the hypothalamus have axons which extend. These cells produce two endocrines in the hypothalamus that are kept and freed by the posterior hypophysis:•Oxytocin activates the contractions of the womb when a adult female is giving birth and besides the secreting of milk when a adult female is suckling her kid.•Antidiuretic endocrine (ADH) stops the loss of H2O from the organic structure when it increases the resorption of H2O in the kidneys and decreases the flow of blood to the perspiration secretory organs. Anterior Pituitary: This is controlled by the endocrines that are released and inhibited from the hypothalamus. The anterior pituitary creates six important endocrines:•Thyroid exciting endocrine (TSH) is responsible for the activation of the thyroid secretory organ.•Luteinizing endocrine (LH)

activates the sex glands to make and let go of the sex hormones—testosterone in males and estrogens in females.

•Follicle exciting endocrine (FSH) activates the follicle cells of the sex glands to make and let go of gametes—ova in females and sperm in males.•Adrenocorticotropic endocrine (ACTH) activates the adrenal cerebral mantle, to make and let go of its endocrines.•Human growing endocrine (HGH) activates the growing, reproduction and fix of a assortment of cells in the organic structure.•Prolactin (PRL) activates the mammary secretory organs of the chest of a adult female to make milk. 3.

Describe the anatomy of the ovaries & A ; fallopian tubings hypertext transfer protocol: //www. innerbody. com/image_repfov/repo03-new.

htmlOvariesEach brace of ovaries is egg-shaped in form. These secretory organs are located on either side of the uterus buttocks to the gap of the fallopian tubings. Their exclusive intent is to bring forth eggs besides known every bit ova every bit good as to let go of the female sex endocrines called estrogen and Lipo-Lutin. Fallopian tubingsThese funnel-shaped tubings spread from the womb to the ovary and theey service to transport the eggs and sperm and it is besides the site for fertilisation of the egg. They are located in the pelvic part of the abdominal pit of the organic structure and each tubing spreads from an ovary to be a portion of the womb.

At the terminal of the tubings they fan out into a featherlike form with projections that look like fingers. The finger-like projections serve to travel the egg cell down the smallest terminal of the funnel to the womb. Sperm

swim up this funnel to run into the egg after sexual intercourse. 4. Describe the anatomy of the womb & A ; vaginaUterusThe womb, besides known as the uterus, an organ that is deep and strong in which fertilized egg, known as the fertilized ovum, is fixed. The fertilized ovum remains here to be nurtured and permitted to turn until it is ready to be born. The womb is located in the pelvic pit buttocks to the vesica and front tooth to the intestine. It is coated with tissues that respond to endocrines leting them to modify themselves and disintegrate during the catamenial rhythm.

When endocrines are no longer secreted after the catamenial rhythm, no more blood is being supplied to the unfertilised egg and tissues therefore they shrivel up and shed as waste stuff out of the organic structure. A glandular mucose membrane known as the endometrium lines the womb and is ejected from the organic structure during menses. A fertilized egg fastens itself to the endometrium upon fertilisation, therefore it does non shed one time a fertilized egg is at that place. The endometrium gives the necessary blood and O for the foetus. The womb is rather lasting as it cans stretch to about three or four inches to house the babe. Powerful musculus cells are necessary to force the babe out of the birth canal with a great sum of force. VaginaThe vagina is a 3 inch tubing with muscular and elastic walls that joins the neck of the womb to the vuvla and the exterior of the organic structure.

It is found in the pelvic organic structure pit to the dorsum or the urinary vesica and to the forepart of the rectum. The elastic walls allow it to stretch during sexual intercourse and to give birth to a babe. The interior walls of

the vagina are made of non-keratinized graded squamous epithelial tissue and are folded for more snap every bit good as to bring forth clash throughout sexual intercourse. The vagina is lubricated as good by liquid secernments made from the vaginal epithelial tissue. A pH exists for the vagina to guarantee that there is no growing of barm or bacteriums and to guarantee that it is a comfy environment for sperm.

Lamina propria is found far down in the epithelial bed and it serves to enable the vagina to stretch. The bed of smooth musculus tissue found far down to the lamina propria enable the vagina to increase in size during sexual intercourse and the birth of a babe. Around that smooth musculus if the adventitia externa which is the external bed of the vagina and is serves as protection. The vagina is a vas for the phallus to during sexual intercourse and it besides transports sperm to the womb and fallopian tubing of the organic structure. 5. Identify the relationship between the female generative system and the hormone system. Reproduction is worlds are influenced greatly by endocrines.

The hormone system is responsible for modulating the release of a assortment of endocrines in the organic structure to transport out assorted maps. With regard to the female generative system, estrogen is a endocrine responsible for the activation and growing of the female secondary sex features such as broadening of hips and development of mammary secretory organs. Estrogen is produced by the ovaries and it besides starts to inspissate the walls of the womb in the event that an egg is to be fertilized. Progesterone is a endocrine that serves to guarantee the liner of the womb

remains thick in the even that fertilisation occurs. It is produced by the principal luteum.

6. Explain the rhythms of the female reproductive systemOogenesisThis involves the creative activity of haploid cells, through miosis, from a primary oocyte which is a alone and original diploid cell. The ovaries of the female have the primary oocytes. Oogenesis merely ends up with the creative activity of one ultimate egg cell (egg cell) for each single primary oocyte. When the primary oocyte divided meitotically, out of the four girl cells made, three were a batch smaller than the 4th 1.

The polar organic structures are the ensuing smaller cells and they breakdown sooner or later, go forthing behind merely the larger egg cell. This procedure occurs one time a month from the period of pubescence to the period of climacteric. Ovarian Cycle (Menstrual Cycle)This rhythm begins when a immature miss starts pubescence. This generative rhythm is responsible for the creative activity of eggs to be fertilized by sperm. The endometrium (uterus) gets itself ready for an egg to be fertilized by a sperm during the catamenial rhythm. If no fertilisation occurs so the liner interruptions down and this is termed menses or more normally the “ period” .

This rhythm is controlled by many endocrines: Luteinizing endocrine (LF) , Estrogen and Progesterone and Follicle-stimulating Hormone. The catamenial rhythm is divided farther into three other phases: Follicular stage: the stage before the egg is releasedOvulatory stage: the stage when the egg is releasedLuteal stage: stage after the egg is released7. Describe the

alterations that occur in the female generative system during gestation and birth.

Uterus.

- The womb of the organic structure stretches for great lengths to suit the size of the babe. Harmonizing to Brook Side Press:
- the length may increase to about 32 centimeters.
- the deepness may increase to about 22 centimeters.
- the breadth may increase to about 24 centimeters.
- the weight may increase to about 1000 gms.
- the thickness of the walls may increase 1 to about 0. 5 centimeters.
- The contents of the venters are shifted to the sides of the organic structure as there is an addition in size of the womb to maximise the infinite for the babe.

Neck.

- The neck experiences a noticeable relaxing which is called the Goodell ‘ s mark.

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- The operculum, besides known as the mucous secretion stopper, develops in the cervical canal. This canal is due to the active mucose secretory organs in the neck that increased in size. Its intent it cover the uterus and protect the foetus from drosss. The mucous secretion stopper is ejected when the gestation is over.

This might go on at the beginning of labour or travel before labour by a twosome of yearss.

VaginaThere is an addition in blood circulation to the vagina. Early on in the gestation the coloring material alterations from light pink to a purple chromaticity known as “ Chadwick ‘ s mark. ” Ovaries. FSH stops existences released as there are already great degrees of estrogen and Lipo-Lutin in the organic structure. The FSH stops menses and ovulation from happening(2) The principal luteum may acquire bigger at the start of the gestation and may besides develop a cyst on the surface of the ovary.

It bit by bit gets smaller in 10 Thursday or 12 Thursday hebdomad of gestation. 8. Identify the alterations that occur in the female generative system du hypertext transfer protocol: //www. brooksidepress. org/Products/Obstetric_and_Newborn_Care_1/lesson_5_Section_1.

htm pealing lifehypertext transfer protocol: //www. nlm. nih. gov/medlineplus/ency/article/004016. htmhypertext transfer protocol: //www. ubykotex. com.

au/puberty/female/reproductive-system/PubertyOvum: the egg besides known as the egg cell has the ability to turn into a foetus if it is fertilized by an sperm. As pubescence begins, one or possibly two egg cell is released from the ovaries every month during menses. Ovary: this is the site of development of the eggs.

The eggs move from the ovaries to the fallopian tubings down into the womb. Uterus: This is the uterus, the site in which the fertilized egg will turn

into a foetus. Fallopian tubing: Once a month during menses, the egg from the ovary travels down one of the fallopian tubings to make the liner of the womb. Uterine Lining: the bed of tissue covering the internal part of the uterus becomes thick during menses as it prepares for the connection of an egg with a sperm. If no fertilisation occurs the liner interruptions down. This is known as the period. Vaginas: It is through this passageway that the catamenial fluid leaves the organic structure after the liner interruptions down. MenopauseWith climacteric:

- The ovaries do non let go of the endocrines Lipo-Lutin and estrogen any longer
- The ovaries cease to let go of ova therefore one can non go pregnant after climacteric.
- Menstruation Michigans.

As endocrine degrees fall, other alterations occur in the generative system, including:

- Vaginal walls come to be thinner, non as moist drier, non as flexible /elastic,
- There is an increased hazard of vaginal barm infections.
- The outside part of the venereal tissue (atrophy labia) thins and can acquire easy irritated.

9. Describe the external genital organ of the male and female and how they are involved in sexual intercourseSexual intercourse can be described as the act of sexual genteelness between a adult male and a adult female.

Interpolation of the ma’s phallus into the woman’s vagina occurs until an climax or interjection consequences. Male external genital organ

- Scrotum

The scrotum is a thin, in darkness coloured out pouching of the tegument of the venters and it comprises of the testicle.

There is non much fat on this genital and it more so has smooth musculus known as dartos musculus to assist command the temperature of the sperm inside the testicle.

- Testis

The testicle is the site of sperm production and it is located in the suspended manner in the scrotum by cords called spermous cords. The testicle is surrounded by adventitia vaginalis.

- Penis

The phallus is the male organ used in the act of sexual intercourse but it is besides the transition for urine and seeds to be released out of the organic structure. It is made up of three cannular organic structures of hollow tissue.

Corpus spongiosum phallus: it houses the urethra and its terminals unfastened into the phallus secretory organs, which contains the gap to the urethra. Corpus Cavernosum: This consists of two organic structures that are organized following to each other in the dorsal part of the phallus. It is surrounded by adventitia albuginea which is a thick white hempen tissue. The deep facia of the phallus is thin, dark in coloring material and slackly

arranges and it serves to cover all three of the organic structures mentioned in the phallus. Female external genital organ

- Monss pubis

This is an distinction that is round in form and is rather fatty. It is located in forepart of the pubic symphysis but is subsequently hidden by coarse pubic hair as pubescence occurs.

- Labia majora

This is two elongated creases that move in a downward and backward way from the mons pubis. This excessively is ulterior hidden by coarse pubic hair as pubescence occurs.

However its internal construction is the opposite as it is smooth and hair free. The hypodermic tissue comprises of chiefly fatty tissue. This genital has some smooth musculus fibres, lymphatic and blood vass and besides some nervousnesss.

- Labia minora

This is two bantam tegument creases located between the labi majora at both sides of the vaginal gap. This does non hold any fatty tissue. It is surrounded by pink, moisture and smooth tegument and is concealed by the labia majora.

- Anteroom of the vagina

This is the crevice between the labia minora and it comprises the gaps of the urethra, vagina and vestibular secretory organ canals.

- Clitoris

This comprises of largely erectile tissue similar to the phallus.

It has the ability to enlarge when sexually aroused as it becomes pumped with blood. It is separate from the urethra and is found behind the labia majora.

- Bulb of the anteroom

It is an extended mass of erectile tissue that is paired. It is located at the sides of the gaps of the vagina

- Greater vestibular secretory organs

These are two bantam egg-shaped constructions found behind the bulb of the anteroom. It serves to release mucous secretion, which lubricates the bottom part of the vagina. 10. Describe Endometriosis. hypertext transfer protocol: //www.

medicinenet. com/endometriosis/article. htm # what_is_endometriosisEndometriosis is the irregular development of endometrial cells that are likewise to the cells organizing the liner of the womb ; nevertheless it I located outside of the uterus alternatively. These endometrial cells so disintegrate every month during the procedure of menses. The endometrial cells fasten themselves to the tissue located on the external surface of the womb and are therefore called adenomyosis implants. These implants can be found on the Fallopian tubing, the ovaries or the external surface of the bowels.

These implants may besides be located in the neck, vesica or vagina but really seldom. Endometriosis implants are about ne’er found on the external surface of the liver or pelvic girdle, lung or encephalon. These implants have the ability to do jobs but for the most portion they are non cancerous.