Disturbances of growth

***Aplasia** : Complete failure of organ development.*

***Hypoplasia**: Failure of an organ to reach its full sized development.*

***Hyperplasia**: or hypergenesis, is an enlargement of an organ or tissue caused by an increase in the amount of organic tissue that results from cell proliferation. It may lead to the gross enlargement of an organ, and the term is sometimes confused with benign neoplasia or benign tumor.*

***Neoplasia**: New growth formed by unlimited multiplication of the cells in an organ* is called a neoplasm or tumor. It can be benign.

***Atrophy**: A decrease partial or complete e in size and weight of tissue or organ after reaching a full development.. Causes of atrophy include mutations (which can destroy the gene to build up the organ), poor nourishment, poor circulation, loss of hormonal support, loss of nerve supply to the target organ, excessive amount of apoptosis of cells, and lack of exercise or disease intrinsic to the tissue itself.*

***Hypertrophy**: is the increase in the volume of an organ or tissue due to the enlargement of its component cells.] It is distinguished from hyperplasia, in which the cells remain approximately the same size but increase in number. Although hypertrophy and hyperplasia are two distinct processes, they frequently occur together, such as in the case of the hormonally induced proliferation and enlargement of the cells of the uterus during pregnancy..*

***Benign tumors**: Slowly growing tissue growth and have distinct borders localized at the site of origin and cells resemble the tissue of origin and not usually problematic*

***Malignant tumors**:* have cells that rapid grow uncontrollably and spread not localization . it's cancerous and spread to distant sites via the bloodstream or the lymphatic system.

***Metastasis**: Spread of malignant tumors away from site of origin through blood or lymphatic vessels.*

***Carcinoma**: A malignant tumor from epithelial origin.*

Sarcoma*: is a rare type of malignant tumor for a broad group of cancers that begin in the bones and in the soft tissues from mesenchymal tissue in younger age.*

Embryoma*: mass of rapidly growing cells (an embryonal tumour) that originates in embryonic tissue. The term is also applied to tumours developing later in life but thought to derive from residual embryonic tissue. Embryomas may be benign or malignant; examples include neuroblastomas and Wilms' tumour.*

Wilms' tumour: kidney cancer that mainly affects children. Also known as nephroblastoma, it's the most common cancer of the kidneys in children and most often affects children ages 3 to 4. It becomes much less common after age 5, but it can affect older children and even adults

Adenoma*: is a benign tumor of epithelial tissue with glandular origin, glandular characteristics, or both.*

Lipoma*: is a benign lump of fatty tissue that usually lies between your skin and the underlying muscle. And while finding any lump on your body can be scary, lipomas are most likely harmless..*

Fibroma*: is a noncancerous (benign) tumor or growth consisting of fibrous connective tissue.*

Osteoma*: benign tumor when piece of bone usually growing on another piece of bone, typically the skull. When the bone tumor grows on other bone it is known as "homoplastic osteoma"; when it grows on other tissue it is called "heteroplastic osteoma.*

Melanoma*: "black tumor," is the most dangerous type of skin cancer. It grows quickly and has the ability to spread to any organ. Melanoma comes from skin cells called melanocytes. These cells produce melanin, the dark pigment that gives skin its color.*

The Central Nervous System

Somatic N.S. : The voluntary part of the CNS. Soma= body.

Autonomic N.S. : The involuntary part of the CNS.

Parasympathetic : A division of the autonomic N.S. that originates from cranial nerves or sacral plexus.

Sympathetic : The other division of the ANS that originates from thoracic spinal segments.

Ganglion Ganglia = Knot.

Synapse Contact site between nerve end and other cell.

Neuron Nerve cell.

Afferent: Sensory nerve supply from an organ to the CNS.

Efferent: Motor nerve supply from CNS to an organ.

Meninges: layers that cover the brain and spinal cord.

Paraplegia : Paralysis of the lower limbs.

Quadriplegia: Paralysis of all four limbs.

Hemiplegia: Paralysis of one side of the body.

Aphonia: Unable to produce voice.

Tinnitus: Noise in the ears.

Deafness: Hearing loss with poor speech discrimination.

Conjunctiva: A protective coating covers the eye when closed.

Glaucoma: is a group of eye diseases as Increased the intra-ocular pressure that can cause damage of optic nerve and blindness.

Cataract: Lens opacity or cloudiness on the lens.

Mydriasis: is the dilation of the pupil, usually having a non-physiological cause or sometimes a physiological pupillary response. Non-physiological causes of mydriasis include disease, trauma, or the use of certain types of drug. It may also be of unknown cause.

Miosis: excessive contraction of the pupil.

Anisocoria is the condition of one pupil being more dilated than the other.

Photophobia: Eye pain with bright light.

Syncope: Loss of consciousness due to temporarily insufficient flow of blood to the brain.

Insomnia: Inability to sleep.

Hypnosis: Sleep like state or is a state in which a person seems to be asleep but can still see, hear or respond to things said to them.

Analgesia: insensibility to pain without loss of consciousness.

Anesthesia: is loss of sensation with or without loss of consciousness.

General anesthetics: induced state of unconsciousness accompanied by partial or complete loss of protective reflexes, including the ability to independently maintain an airway and respond purposefully to physical stimulation or verbal command.".

Local anesthetics: Drugs which produce local or topical anesthesia

Pre-anesthetic medications: Drugs used before anesthesia to facilitate the induction and maintenance of anesthesia.

Hypnotics: Drugs which induce sleep.

Analgesics: Drugs used to prevent or abolish pain.

Antipyretics: Drugs that lower high body temperature.

Antidepressants: Drugs used to control depression.

Antiepileptic: Drugs used to control epilepsy.

Muscle relaxants: Drugs that reduce tension in the muscles.