

Glossary of terms for radiation side effects

8-9-08

Brachial plexopathy

Damage or a disorder that affects the network of nerves for the arm.

Cellulitis

Excessive collection of fluids generally accompanied by inflammation and warmth.

Epitheliolysis (acute)

Damage to skin capillaries which provide oxygen to the tissue cells.

Erythema (acute)

Redness of the skin caused by abnormal blood accumulation in the capillaries.

Fibrosis

Formation of a scar (new tissue) in a wounded area characterized by excessive, shortening of muscle contraction, an abnormal number of normal cells within the same area, a decrease in vascular blood supply and excessive amounts of collagen (protein substance contained in all connective tissue.)

Hyperpigmentation

Darkening of the skin

Hypopituitarism

Damage to the pituitary gland (which is located at the base of the skull and regulates growth and metabolism) causing it to produce lower than normal levels of its hormones.

Induration

Hardening of a particular spot of skin.

Inflammation

A localized protective response caused by injury to tissue which serves to dilute or wall off the injured tissue. It is typically characterized by pain, heat, redness, swelling and loss of function. It involves a complex series of events including dilation of blood vessels and increased flow of healing plasma agents such as white blood cells.

Inflammatory necrotic tissue

Tissue death with associated inflammation.

Lesions of the 8th cranial nerve

Any discontinuity of tissue or loss of function in this nerve can result in deafness, tinnitus, dizziness, vertigo and vomiting.

Lymphedema

Fluid retention in the skin

Mucositis

A protective response to damage which causes inflammation of mucous membranes and shuts down the mucous glands.

Myelopathy

A disease or condition affecting the spinal cord.

Necrosis (acute)

The sum of morphological (structural) change indicative of cell death which is caused by the progressive degradation action of enzymes (Proteins or RNA that act as biological catalysts).

Neuritis

Inflammation of a nerve which is attended by pain, tenderness, anaesthesia (loss of any sensation including pain), paraesthesias (an abnormal sensation such as prickling or burning), paralysis, wasting and disappearance of the reflexes.

Nerve palsy

Loss of motor function, impairment of sensory function or paralysis due to nerve damage.

Osteoradionecrosis

Death of the bone and soft tissue caused by radiation injury with the highest incidence being in the mandible. The fundamental cause is loss of vascular supply with the subsequent incidence of wounds not healing, infection and progressive tissue hypoxia.

Sensorineural hearing loss

A form of deafness that occurs due to dysfunction of the auditory nerve (VIII cranial nerve)

Sensory loss in the Mandibular (Lower jaw) Ramus (General term that means “branch”.) Typically this is referring to nerve damage in the lower jaw.

Stenosis of the ear canal

A narrowing or stricture of a duct, canal or tube due to scar tissue or tumor.

Stomatitis

Sores inside the mouth.

Tetanus

A state of sustained muscular contraction without periods of relaxation caused by repetitive stimulation of the motor nerve trunk that individual muscle twitches are fused.

Tinnitus

A noise in the ears, such as a high pitched ringing, buzzing, roaring, or clicking. In some cases such sounds may be at times heard by others besides the patient.

Trismus

Motor disturbance of the trigeminal nerve, especially spasm of the masticatory muscles, with difficulty in opening the mouth. Can also be caused by scarring in the masticatory muscles from surgical procedures.

Ulceration of Soft tissue

A local defect in the surface tissue produced by sloughing (casting off).

Vertigo

An illusion or sensation of the world revolving around a person.

Vestibulocochlear (VIII cranial) nerve damage

Damage to the VIII cranial nerve can be responsible for loss of hearing or balance.

Xerostomia

Dry mouth caused by lack of salivary gland function.