Bases of Neuropathology

Sensitivity & its disorders. Part III
ZONES OF SEGMENTAL INNERVATION

- **cervical segments**
  head, neck, upper arms, outer surface of hands

- **thoracic segments**
  trunk, inner surface of arms

- **lumbar segments**
  anterior surface of legs

- **sacral segments**
  back surface of legs, buttocks
SCHEME OF SEGMENTAL INNERVATION ZONES
MAIN TYPES OF SENSITIVITY DISORDERS

- anesthesia
- hypesthesia
- hyperesthesia
- hyperpathia
- paresthesia
- dysesthesia
- pain
ANESTHESIA

- complete loss of any type of sensitivity. There are tactile anesthesia, pain (analgesia) and temperature anesthesia. The loss of all types of sensitivity is called *total anesthesia*
HYPESTHESIA

- reduced perception of any stimulus; may refer to sensitivity in whole or in part
HYPERESTHESIA

- exaggerated perception to different stimuli; caused by decrease of receptor’s excitability threshold
HYPERPATHIA

- abnormally painful and exaggerated reaction to a stimulus; sensation is poorly localized and differentiated, seems like unpleasant with a long lasting effect
PARESTHESIA

- spontaneous positive, prickling sensation that is not unpleasant; usually described as “pins and needles”
DYSESTHESIA

- any abnormal sensation described as unpleasant by the patient; the sensation does not correspond to the irritated receptor (pain feels like warm, touch as cold)