CENTRAL NERVOUS SYSTEM INFECTIONS

And other miscellaneous infections
**Hematogenous spread**

**Direct spread**

**Anatomic defects**

**Direct intraneural**

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**Routes of Infection**

- CSF produced in **choroid plexus**
- Secreted and circulated by **ependymal cells**
DISEASES OF CNS

- Meningitis
  - Purulent meningitis
    - Acute
  - Aseptic meningitis
- Encephalitis/ meningoencephalitis
  - Viral
- Brain abscess
LABORATORY DIAGNOSIS

- Meningitis
  - Specimen collection and transport
  - Initial processing
  - CSF laboratory results
  - Visual detection
  - Direct detection
  - Other tests
  - Culture

http://www.cdc.gov/meningitis/lab-manual/
Eyes, Ears, and Sinuses Infections
EYES INFECTIONS

MICROBIAL FLORA

- *S. epidermidis*
- *Lactobacillus* spp

DISEASES

- Conjunctivitis
- Keratitis
LABORATORY DIAGNOSIS

- Specimen collection and transport
- Direct visual examination
- Culture
- Non-culture methods
EYES, EARS, AND SINUSES INFECTIONS
EARS INFECTIONS

MICROBIAL FLORA

- *S. pneumoniae*, *propinobacterium acnes*
- *S. aureus*
- *Candida spp*

DISEASES

- Otitis Externa
- Otitis media
LABORATORY DIAGNOSIS

- Specimen collection and transport
  - Benzalkonium chloride
- Direct visual examination
- Culture and Non-culture methods
EYES, EARS, AND SINUSES INFECTIONS
Sinusitis
SKIN, SOFT TISSUES AND WOUND INFECTIONS
INFECTION OF THE SKIN

- Normal flora
- Skin and soft tissue infections
- Wound infection
  - Postoperative
  - Bites
  - Burns
Infections of epidermis and dermis
- Erysipelas and cellulitis
- Pustule
- Vesicles and bullae

Wound infections
- Postoperative
- Bites
- Burns