

OSTEOMYELITIS:

⇒ Inflammation of the bone and marrow.

Pyogenic Osteomyelitis:

Always caused by bac infection.

Staphylococcus species. - (Aureus)

E. coli, Pseudomonas, gonorrhoea, salmonella
+ subleucoides

Portal entry of organism → the right blood
Osteal Implantation.

Location: →

In children: metaphyseal Area of long bones
(knee, Ankle, hip)

In neonates: metaphysis, epiphysis, or both

In Adult: epiphysis and subchondral Regions

PATHOGENESIS: Age - 5-15y Boy >

events

⇒ Transient Bacteremia → Micro-organisms to the mucosa.

Release the causative organism into
the blood



Infection Reaches the metaphysis of long
bone.

They drain into the Medullary cavity

They penetrate Blood vessel And create sequestra
low within it.

Auto neutrophilic inflammation

Rare



Blood supply ↓ → nerves of bone



speed of inflammation



Formation of subperiosteal Abscess.

The Abscess continues to expand through the cortex into the subperiosteal tissue



The extension of this process into the skin produces a draining sinus.

MORPHOLOGY:

Gross: sequestrum Appear with Ragged brownish

Micro: Acute Osteomyelitis → only neutrophils

chronic osteomyelitis → neutrophils Along with

chronic inflammatory cells (lymphocytes)

MORPHOLOGIC VARIANTS

→ Brodie's Abscess

→ sclerosing osteomyelitis of bone → develops the jaw.

COMPLICATIONS:

→ septicemia

→ Squamous cell carcinoma

→ Acute suppurative Arthritis.

⇒ 2ndary Amyloidosis.

VIVA

S.N ON SEQUESTRUM:

→ segmental necrosis of bone due to

↓
which occurred as a result of Pus of the
lift the periosteum & Reduce Blood flow.

∴ The fragment of dead necrotic piece of bone in the pus
is known as sequestrum

VIVA

What is cloaca: → The soft tissue abscess may
penetrate the skin to form a draining sinus.
A hole is formed in this process called

↓
Cloaca →

VIVA

S.N ON INVOLUCRUM:

After 1st week of chronic inflammation,

stimulate osteoclastic bone Resorption

↓
deposition of Reactive bone in periphery

They form sheath around the sequestrum.

∴ This Reactive bone formed is known as

INVOLUCRUM