

First Semester Basics of Surgery

INFECTION OF THE JOINT AND BONE



Sawa University

College of health and medical techniques

Department of Anesthesia

Stage: Second

جامعة ساوة الاهلية

كلية التقنيات الصحية والطبية

قسم تقنيات التخدير

المرحلة: الثانية

محاضرة رقم: 7

Lecture No. 7

نظري

Theoretical

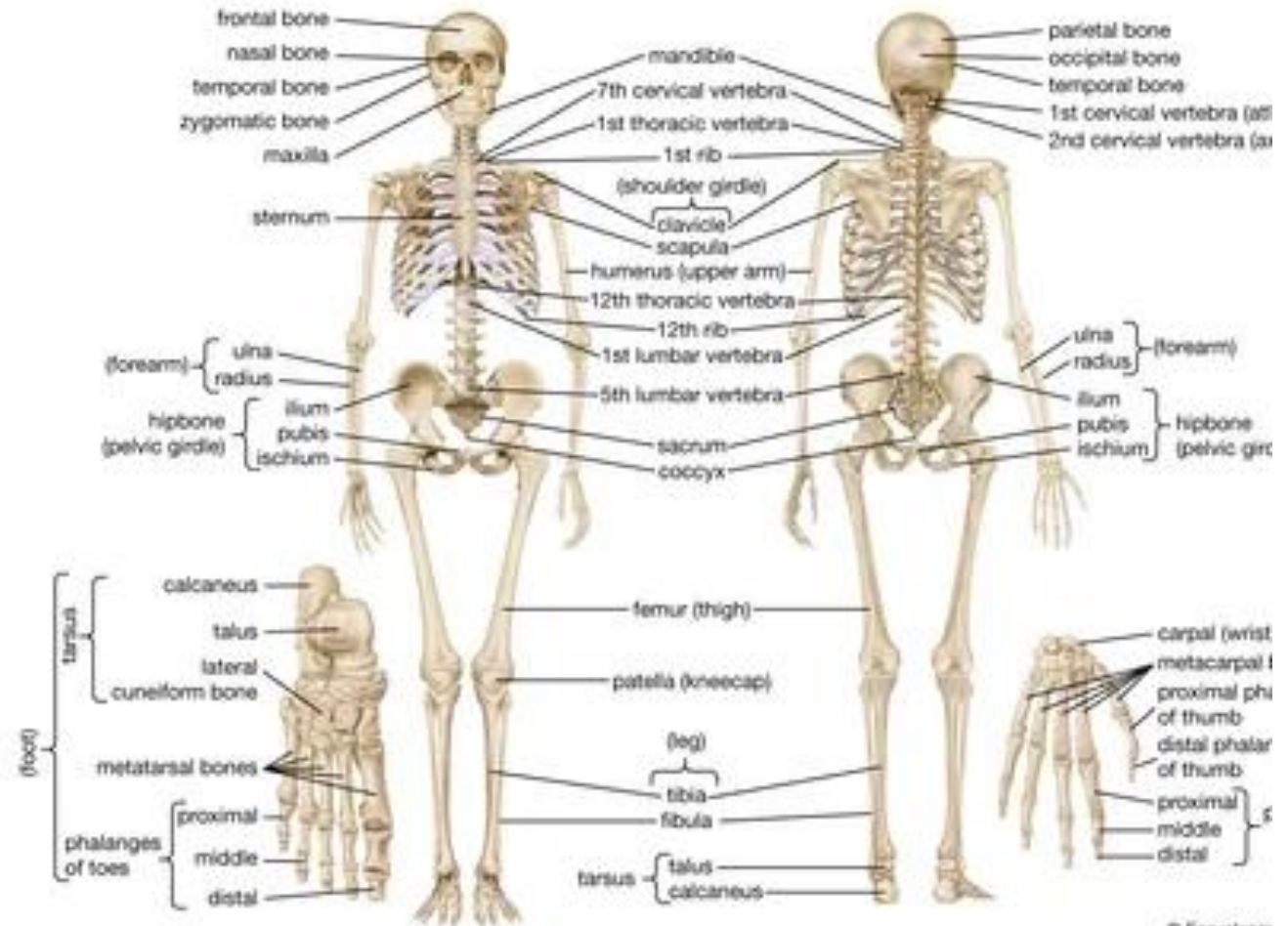
استاذ المادة : م.م. رباب سمير كاظم

OSTEOMYELITIS

IS A BONE AND JOINT
INFECTION.

ITS MAINLY CAUSED BY
BACTERIA CALLED

STAPHYLOCOCCUS AUREUS



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CAUSES AND SOURCE OF BACTERIA

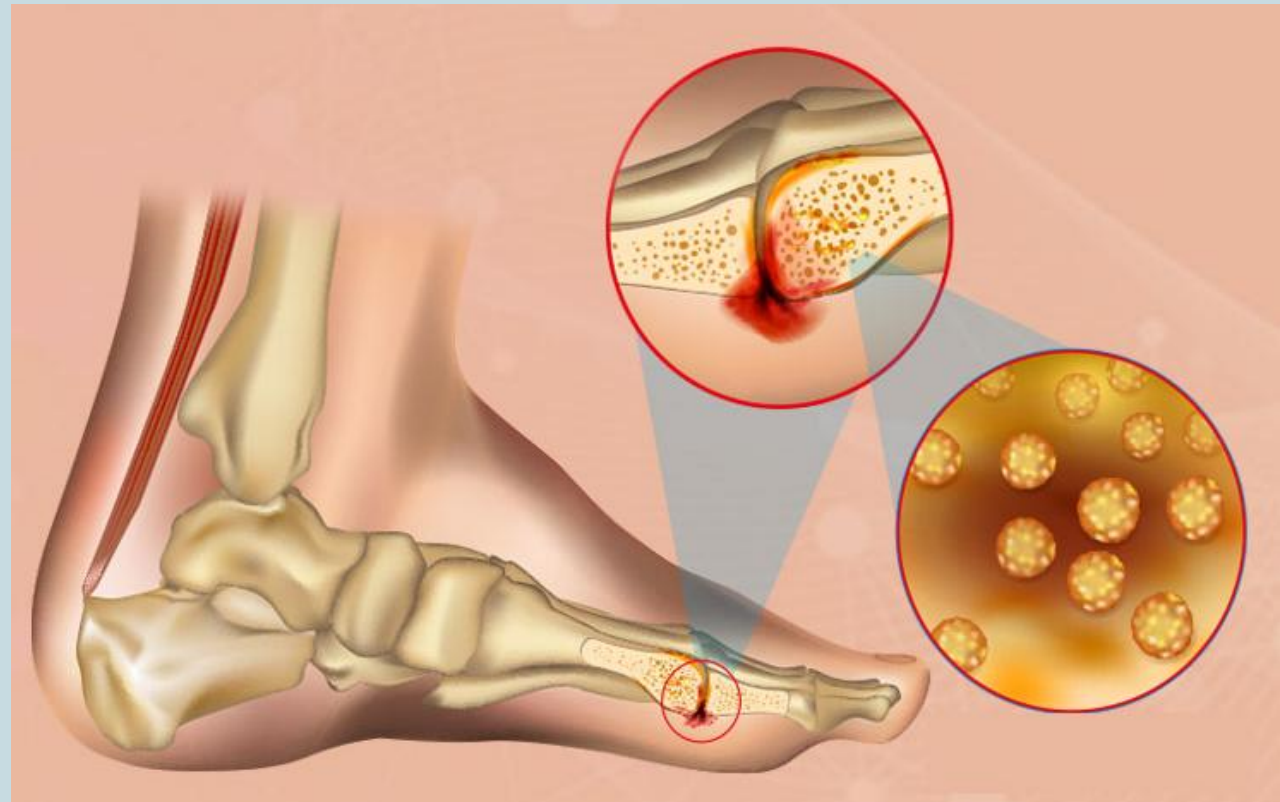
✓ Infection can spread to bone from:

- 1- Infected skin, tendon or muscles next to the bone.
- 2- Blood born (bacteremia) from infection in other part of the body.
- 3- After bone surgery especially when the surgery is performed after injury or inserting bone plates or metal rods in the bone.



RISK FACTORS ARE:

- 1. Diabetes.
- 2. Recent bone and joint injury.
- 3. Bone surgery.
- 4. Weakened immune system.



SYMPTOMS

1. bone and joint pain.
2. local swelling, redness and warmth.
3. Pus sometimes in infected open wounds.
4. Fever and chills.
5. General discomfort and malaise.

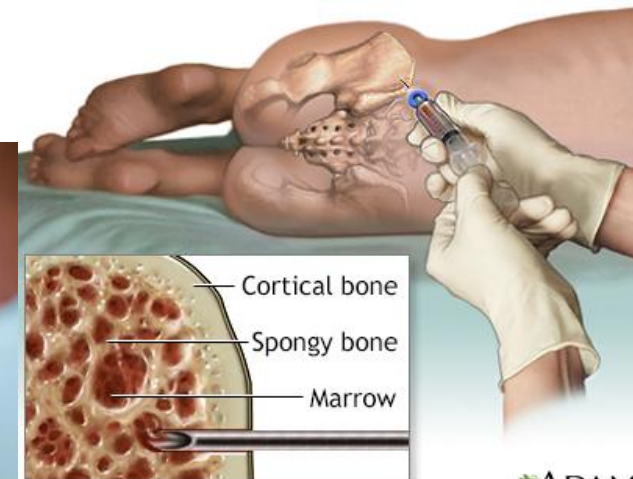
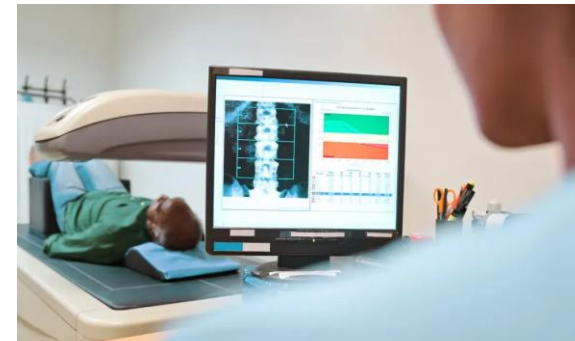


INVESTIGATIONS (TESTS FOR DIAGNOSIS)

1. Biopsy of the bone for culture and sensitivity and histopathological confirmation.



2. X-ray of the bone.



3. MRI of the bone.



TREATMENT

❖ The **goal of treatment** is to:

- ✓ Get rid of the infection
- ✓ Reduce damage to the bone and surrounding tissues.

TREATMENT

1-Antibiotics:

1. Is the main way of treatment to destroy the bacteria.
2. The patient may receive more than one type of antibiotic at the same time.
3. Are given for at least 4-6 weeks.
4. Are often given at home through intravenous I.V route.
5. Common antibiotic used is methicillin.

TREATMENT

2-Surgery

- 1. If antibiotics fail to treat the condition.**
- 2. Is to **remove the dead bone tissue** resulted from infection.**
- 3. The **cavity (open space) left** after removal of the dead bone tissue may be **filled with bone graft** or **packing material** (antibiotic cement spacer) to promote resolution of infection**

Complication

1. Development of a serious form of staph known as methicillin resistant Staphylococcus aureus (MRSA) causes infections that can be more severe and need special antibiotics to treat.
2. Spread of infection to the blood and other organs causing life threatening illness.
3. Damage growth plates, bones and joints.
4. Cause chronic arthritis and bone fractures.



THANK YOU

م.م. رباب سمير كاظم