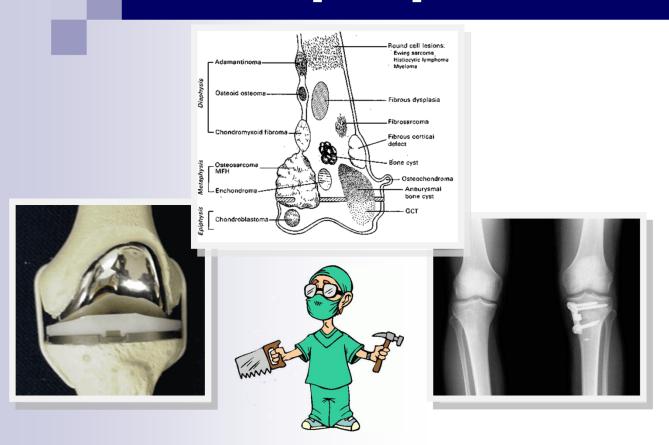
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# **Orthopaedics Punch**

A Complete Synopsis of Orthopaedics with Images and Illustrations for PGMEE.



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# **ORTHOPAEDICS PUNCH**

#### **AUTHOR's WORD**

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"The true and actual test of a student is how he stands out during the test of adversity"



# **AUTHOR'S WORD**

"Why is that we are the most unfairly tested" – This is the thought process right now going in the minds of hundreds of PG aspirants all over and around considering the fact that the age old system of Post Graduate Medical Entrance Examination has taken a sudden twist which is not only unexpected but unconventional to an extent.

"We make History" - The classical methodology of teaching with its wide dimensions and broad horizons has always stood up against all patterns of examination and therefore I felt a dire need to go out there and tell the warriors (students these days are actually) that in this battle of coming examination it is the basics, that you have acquired during the period of five and a half years, which are going to stay with you to come over this hurdle.

"Easier said than done" – But what do we do when as a final year student, I have given counted couple of hours to this subject which is called Orthopaedics when I was struggling with giants like Medicine, Surgery, Gynecology & Obstetrics etc. That's why this small booklet was the first thing that came to my mind when I was asked such sort of questions from the students all over.

"Big things do come in small packages" – Probably I am saying so because I have tried my level best to simplify the subject with all the commonly asked questions, the controversies, the allied subjects with images and illustrious explanations under one heading so that you don't loose your synchronization with subjects like Anatomy, Radiology, Pathology and Pharmacology etc. in one single booklet.



# **Sample Questions**

# 1. Excessive and overuse of Bisphosphonates can cause:

- a. Atypical vertebral fractures
- b. Atypical femoral neck fractures
- c. Atypical fractures of subtrochaenteric femoral region
- d. Atypical skull fractures

#### **Answer: C**

Explanation: In patients with osteoporosis, bisphosphonate treatment increases bone mineral density and lowers the risks for vertebral and proximal femur fractures. Because the biological half-life of bisphosphonates exceeds 10 years \*, treatment could result in long-lasting inhibition of bone remodelling\*. This effect, in turn, could result in stress fractures in the outer cortex of the femoral shaft or in other areas with high mechanical stress loads. These fractures are defined as atypical subtrochaenteric fracture pattern as a "transverse or short oblique fracture line originating at the lateral femoral cortex between the lesser trochanter and the distal metaphysis."

#### 2. Varus is defined as:

- a. Distal limb pointing towards midline in the saggital plane
- b. Distal limb pointing towards midline in the coronal plane
- c. Distal limb pointing away from midline in the coronal plane
- d. Distal limb pointing away from midline in the coronal plane

## Answer: B

**Explanation**: The **sagittal plane** describes the separation of left and right sides of the body from top to bottom and from front to back.

Deformities in the sagittal plane include:

- a. Flexion
- b. Extension
- c. Procurvatum
- d. Recurvatum

The **coronal/transverse plane** is defined as that occurring horizontally across the body.



#### Deformities in this plane include:

- a. Varus
- b. Valgus
- c. Externl rotation
- d. Internal rotation
- e. torsion
- 3. What does **VAC stand for**:
  - a. Vaccination Against Communicable diseases
  - b. Victorian AIDS Council
  - c. Vacuum Assisted Closure
  - d. Valve Associated Cardiomyopathy

Answer: C

### **Explanation:**

VAC also called as Negative-pressure wound therapy (NPWT) is a therapeutic technique *using a vacuum dressing to promote healing in acute or chronic wounds* and enhance healing of first and second degree burns. The therapy involves the controlled application of sub-atmospheric pressure to the local wound environment using a sealed wound dressing connected to a vacuum pump.

General technique for NPWT is as follows: a <u>dressing</u> is fitted to the contours of a wound and sealed with a transparent film. A drainage tube is connected to the dressing through an opening of the transparent film. The drainage tube is also connected to a <u>vacuum</u> source, turning an open wound into a controlled, closed wound while removing excess fluid from the wound bed to enhance circulation and remove wound fluids. This creates a moist healing environment and reduces edema. The technique is usually used with <u>chronic wounds</u> or wounds that are expected to present difficulties while healing (such as those associated with <u>diabetes</u>)

- 4. A patient has 2 month POP Cast for fracture of left tibia. Now he needs immobilization with single crutch. Which side the crutch should be prescribed:
  - a. Left side
  - b. Right side
  - c. Any side
  - d. None of above

Answer: B



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#### **Explanation**:

- When walking with just one crutch, hold the crutch on the opposite side of the affected leg. It is common to
  want to use the crutch on the injured side, however this causes you to lean and put more pressure on the
  injured side.
- While stepping, swing the crutch through as you step with the affected side. The crutch and your foot should hit the floor at the same time. Then step through with the unaffected leg.
- By holding the crutch on the opposite leg you can take weight off the injured side and better support yourself as you walk.