

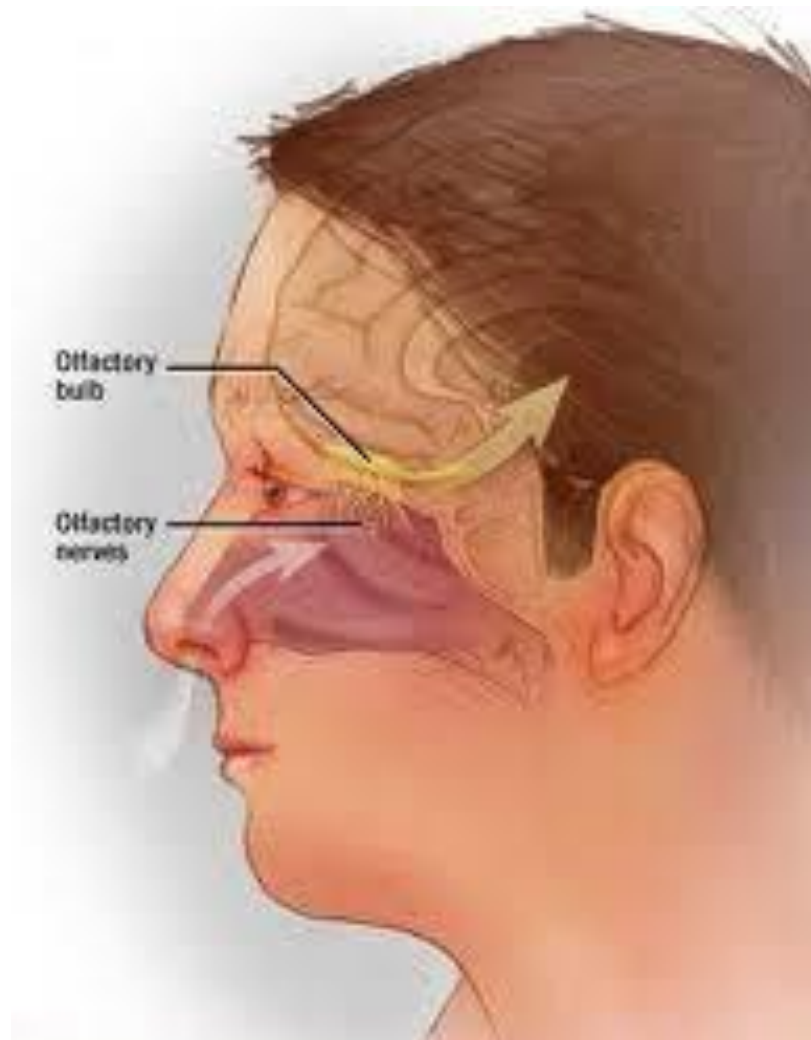
1. Antonio is hit in the face with a football during practice. An X-ray reveals multiple fractures of the bones around the orbit. **Name the bones that form the margins of the orbit.**



2. Mrs. Brusco, a woman in her 80's, is brought to the clinic with a fractured hip. X-rays reveal compression fractures in her lower vertebral column and extremely low bone density in her vertebrae, hip bones and femurs. **What are the condition, cause and treatment?**



3. Jack, a young man, is treated at the clinic for an accident in which he hit his forehead. When he returns for a check-up, he complains that he cannot smell anything. A hurried X-ray of his head reveals a fracture. **What part of which bone was fractured to cause his loss of smell?**



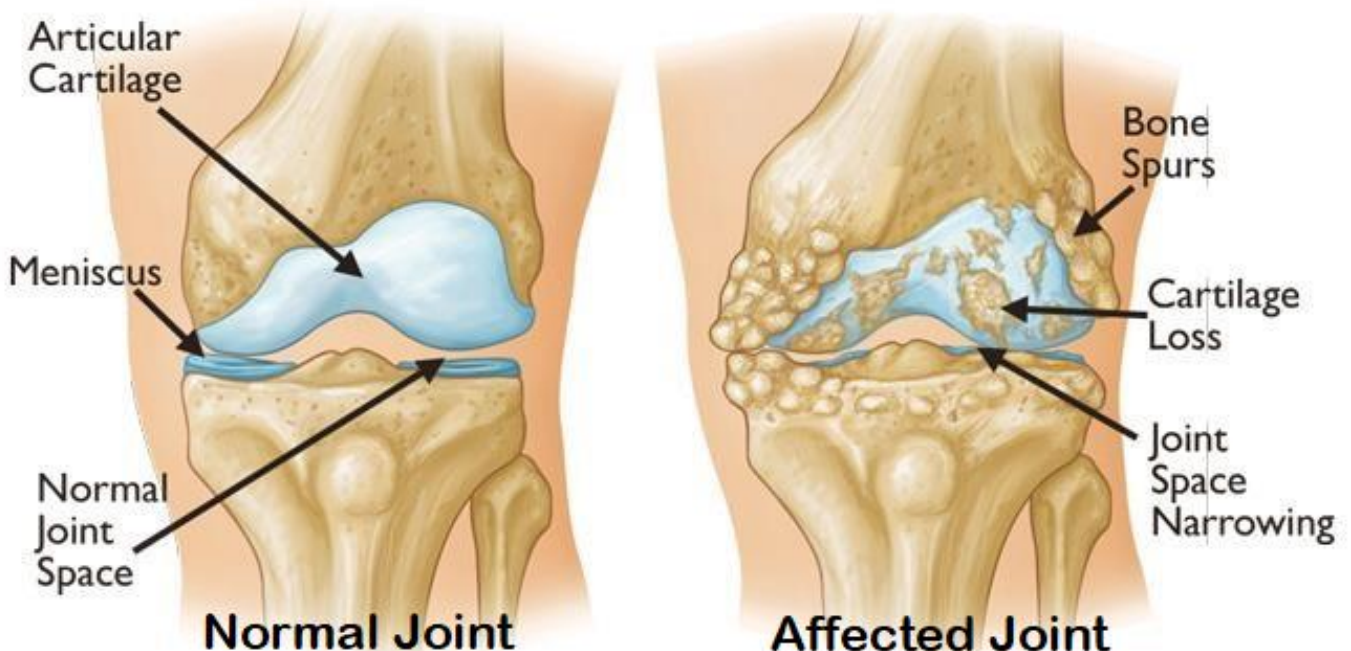
4. A middle aged woman comes to the clinic complaining of stiff, painful joints and increasing immobility of her finger joints. A glance at her hands reveal knobby, deformed knuckles. **For what condition will she be tested?**



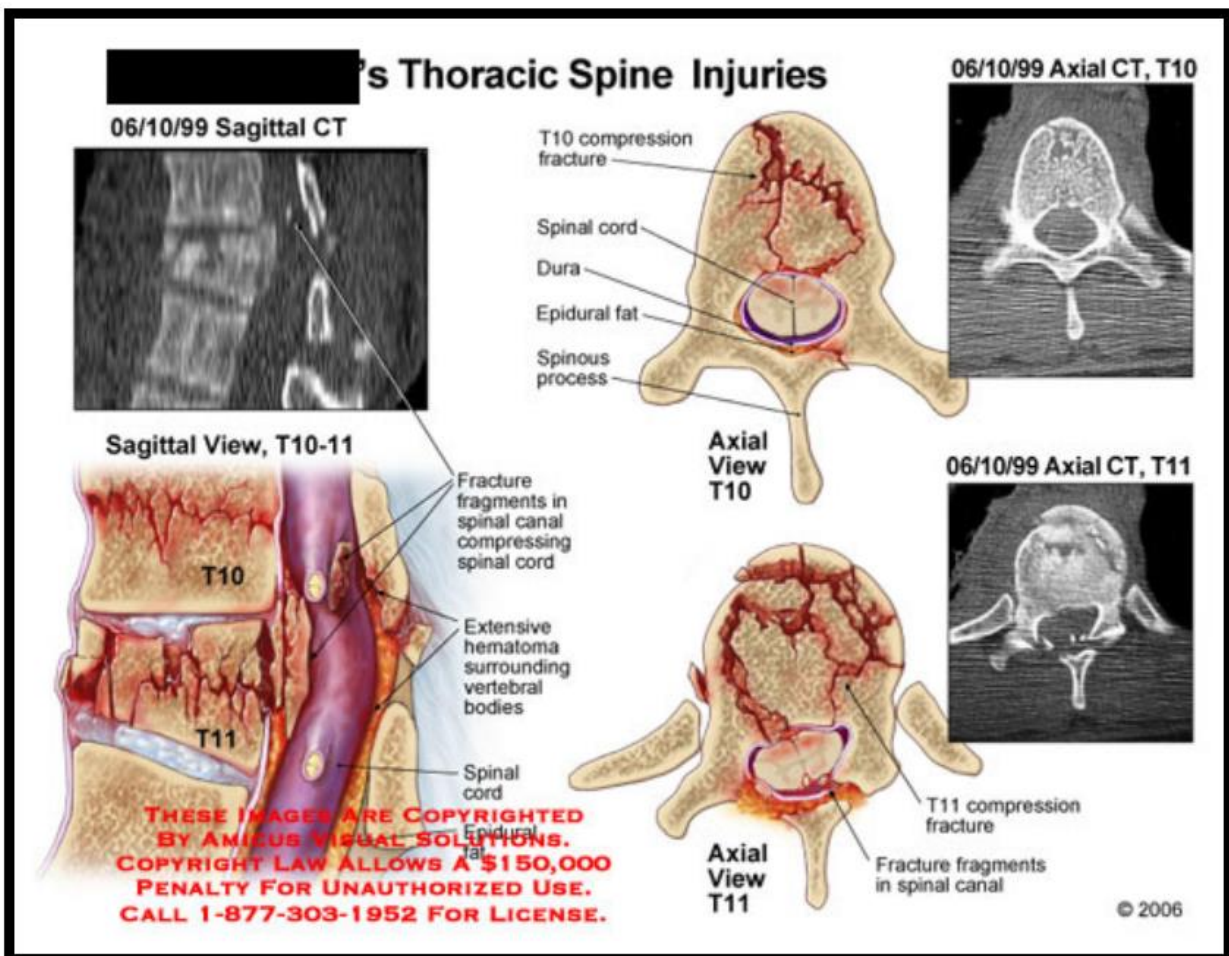
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5. At his 94<sup>th</sup> birthday party, James was complimented on how good he looked and was asked about his health. He replied, “I feel good most of the time, but some of my joints ache and are stiff, especially my knees, hips and lower back, and especially in the morning when I wake up”. A series of X-rays and an MRI scan taken a few weeks earlier had revealed that the articular cartilages of these joints were rough and flaking off, and bone spurs (overgrowths) were present in the ends of some of James’s bones. **What is James’s probable condition?**



6. Janet, a 10-year old girl, is brought to the clinic after falling out of a tree. An X-ray shows she has small fractures of the transverse processes of T<sub>3</sub> to T<sub>5</sub> on the right side. Janet will be watched for **what abnormal spinal curvature over the next several years?** Support your answer.



**7. The serving arm of many tennis players is often significantly larger (thicker) than the other arm. Explain this phenomenon.**



**8. Jerry is giving cardiopulmonary resuscitation (CPR) to Ms. Jackson, an elderly woman who has just been rescued from the waters of Cape Cod Bay. What bone is he compressing?**





9. Rita's bone density scan revealed she has **osteoporosis**. Her physician prescribed a drug that inhibits **osteoclast** activity. Explain this treatment.

