

**MUQADASS KHAN**

**BIOMECHANICS- II**

**ASSIGNMENT NO: 3**

**Q:** Write down the main 5 differences on cancellous and cortical screws.

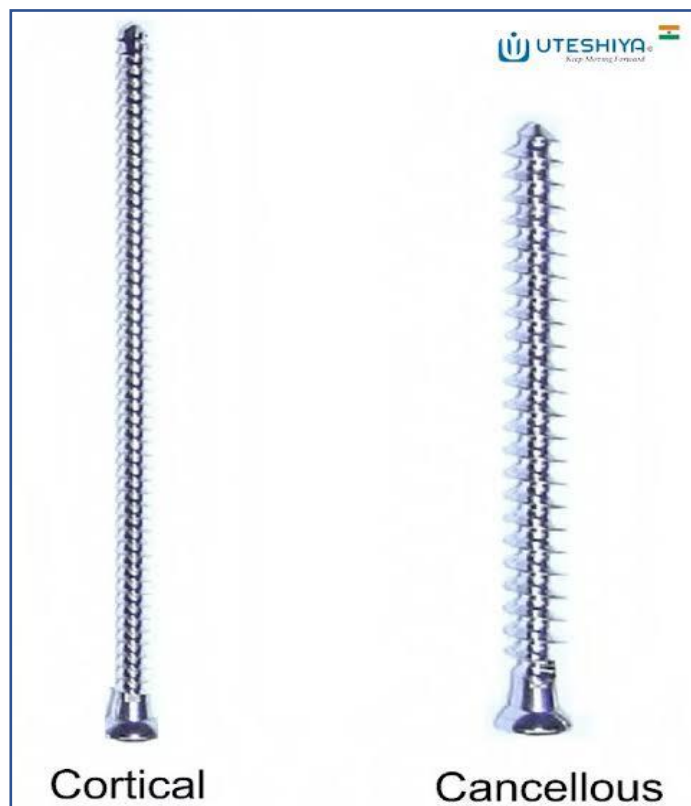
uses the images as well

**Cortical screws:** greater surface area of exposed thread for any given length.

-better hold in cortical bone.

**Cancellous screws:** cover diameter is less

- the threads are spaced farther apart
- leg effect option with partially threaded screws
- theoretically allows better fixation in soft cancellous bone.



## 5 differences on cancellous and cortical screws.

	Cortical Screw	Cancellous Screw
DEFINITION	A cortical screw is a type of mechanical screw used by orthopedic surgeons to affix bone plates and other orthopedic devices to cortical bone	A cancellous screw is a type of mechanical screw used by orthopedic surgeons to affix bone plates and other orthopedic devices to the cancellous bone
PITCH	Possess a fine pitch	Possess a coarse pitch
GELATINOUS COVERING	Presence of a large thread pattern	Presence of a smaller thread pattern
TYPE OF BONE INVOLVED	Type of bone involved	Cancellous bone
FUNCTION	To produce interfragmentary compression in places such as the outer layer of the long bones forming the shaft and inner part of the trabecular bone at the proximal and distal ends of the bone tissue	To produce interfragmentary compression in joint areas as in this tibia head fracture