Test your surgical skill

Soft-tissue penetration during drilling

Tasks

1. Observe the difference between a sharp and a blunt drill bit
2. Drill hole through both bone cortices using sharp or blunt drill bits, or K-wire; try to minimize soft-tissue penetration
3. Check degree of damage done by soft-tissue penetration

Learning outcomes

- Learn to differentiate between sharp and blunt drill bits
- Develop feeling for penetration of opposite bone cortex and compare results using blunt and sharp drill bits or K-wires
- Assess possible damage to soft tissues and neurovascular structures

Take-home message

- Use sharp drill bits to avoid uncontrolled penetration into muscles, nerves, and vessels
- Blunt drill bits must be replaced

Observe the surface of the very tip of the drill bit

Method

Measurement of depth of penetration

Plasticine representing soft tissue

Bone