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

### Method

**Observe the surface of the very tip of the drill bit**

- Sharp: no reflection of light on the tip
- Blunt: light is reflected on the tip

**Plasticine representing soft tissue**

**Bone**

**Plasticine representing soft tissue**

**Bone**

**Measurement of depth of penetration**

**Plasticine representing soft tissue**

**Bone**