

Howmedica® Spherocentric™ Knee

Vitalium® Alloy/Ultra-High Molecular
Weight Polyethylene (RCH 1000) Components

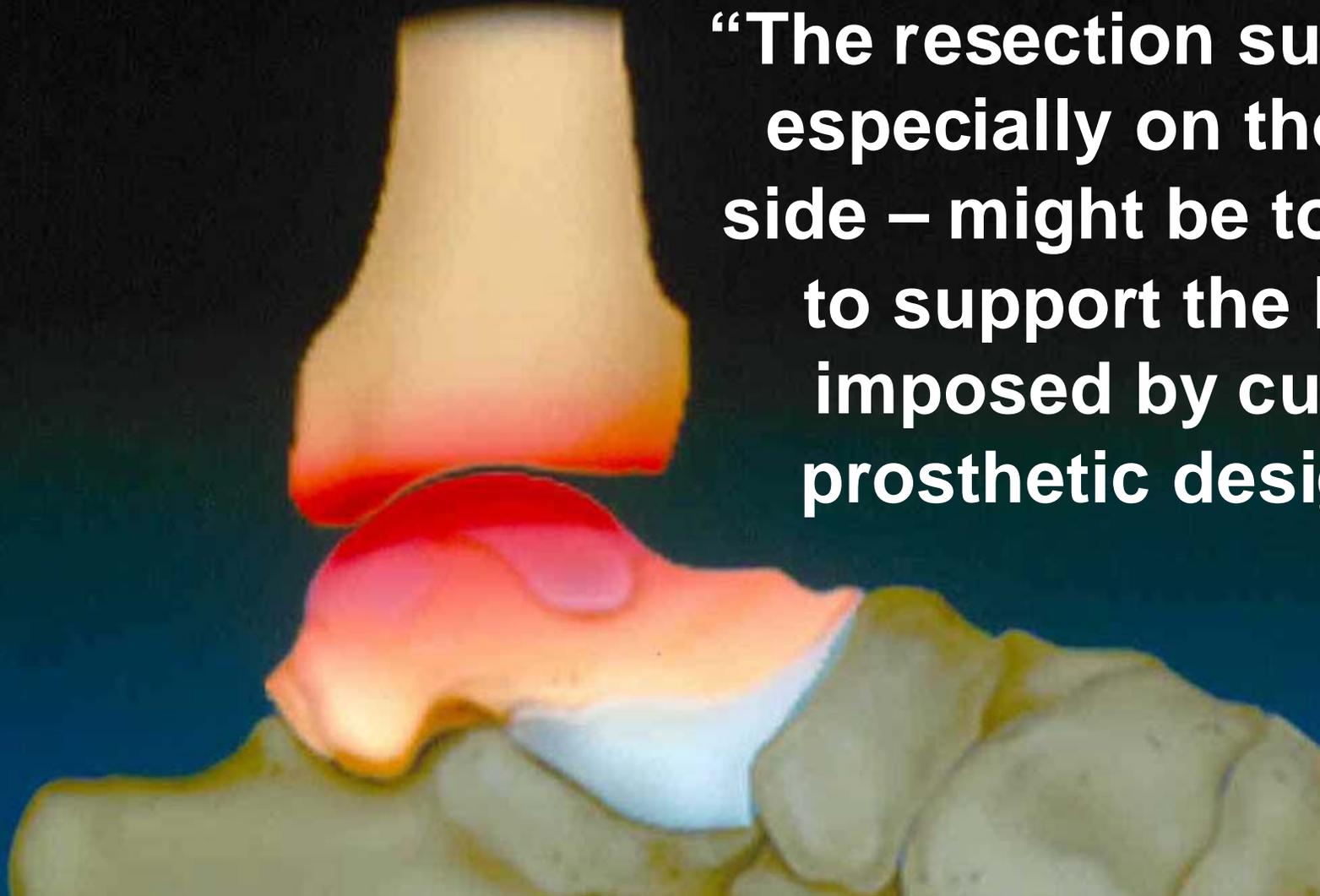


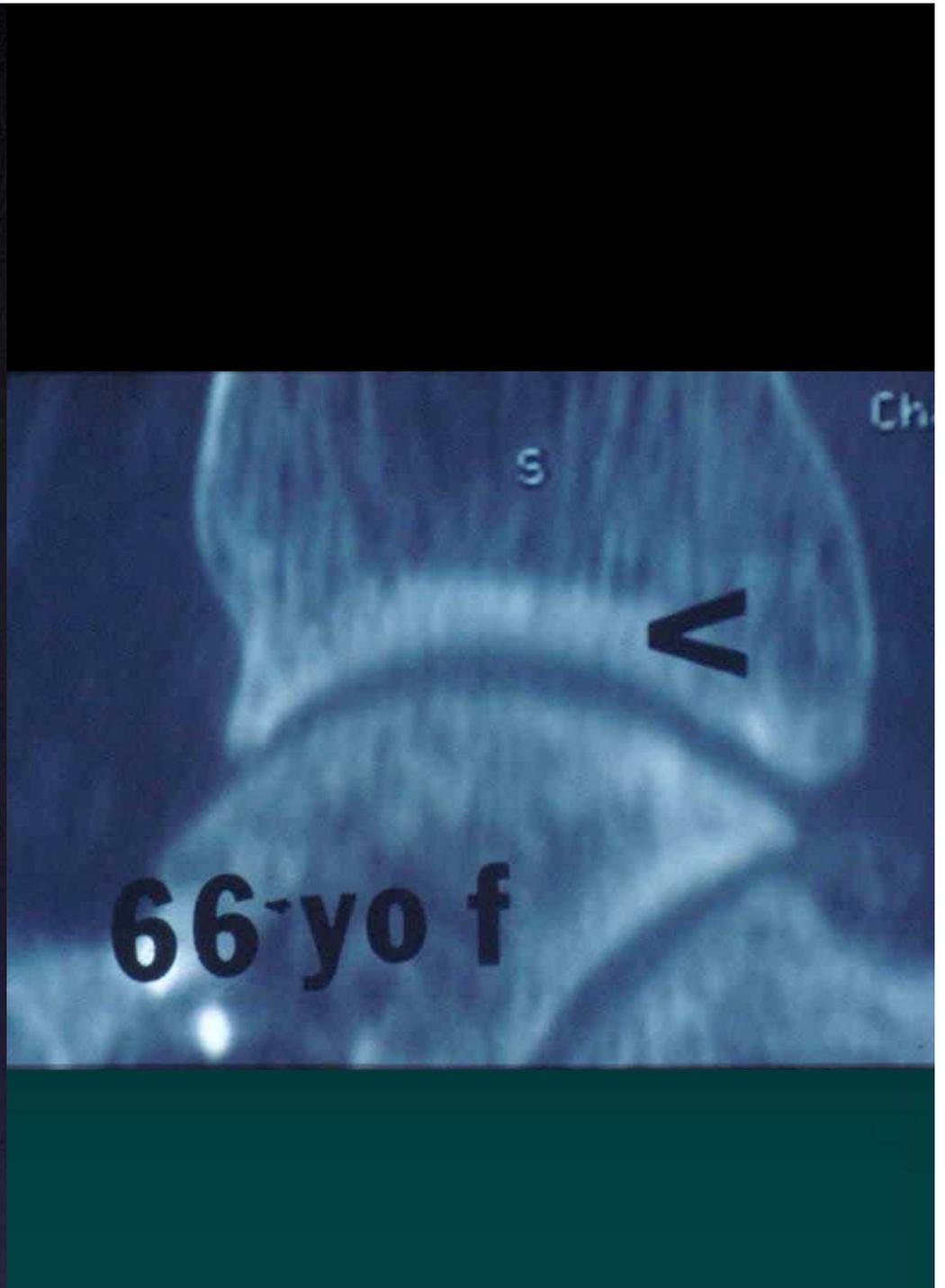


BONE STRENGTH AT ANKLE

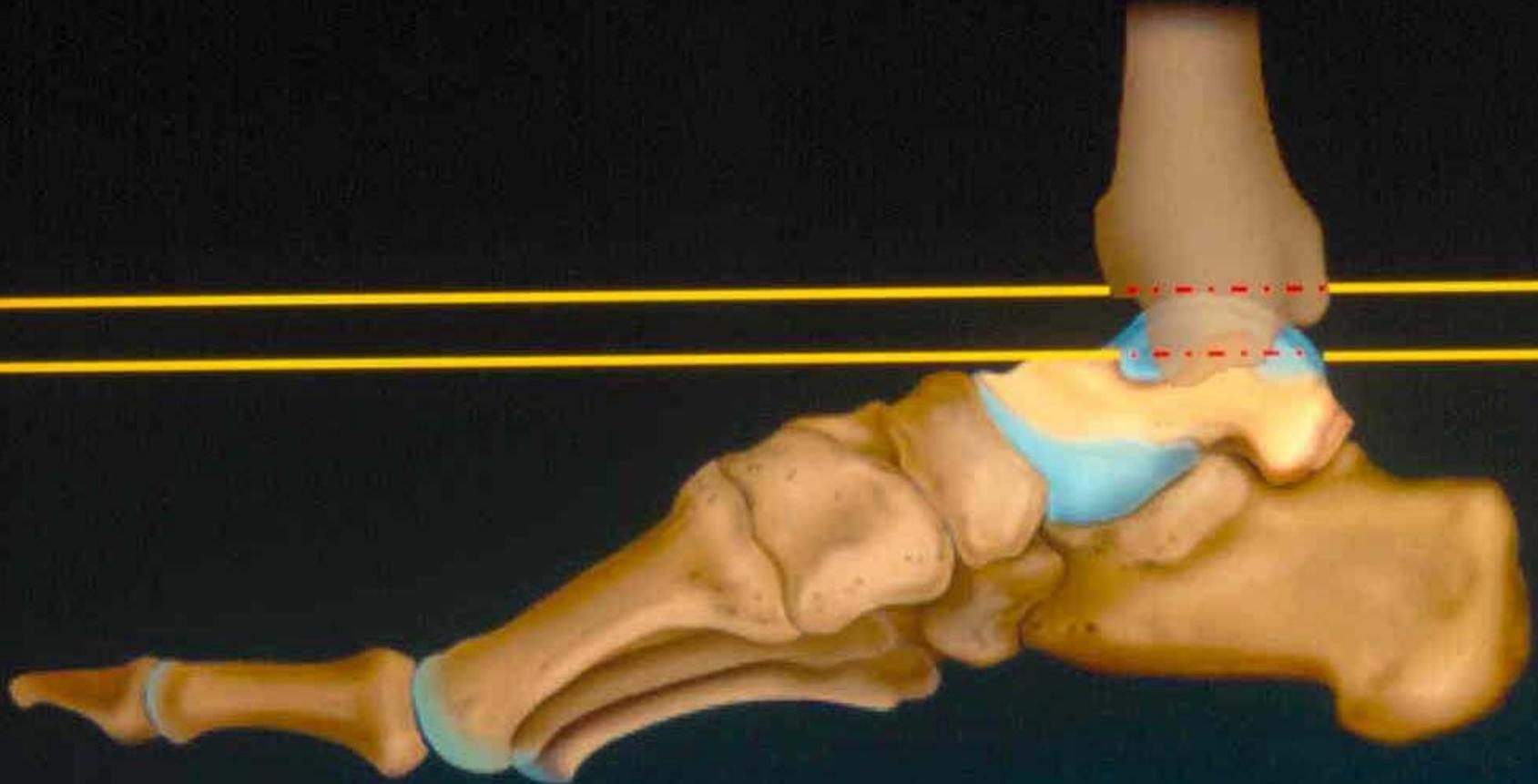
Hvid, et al.; CORR, 1985

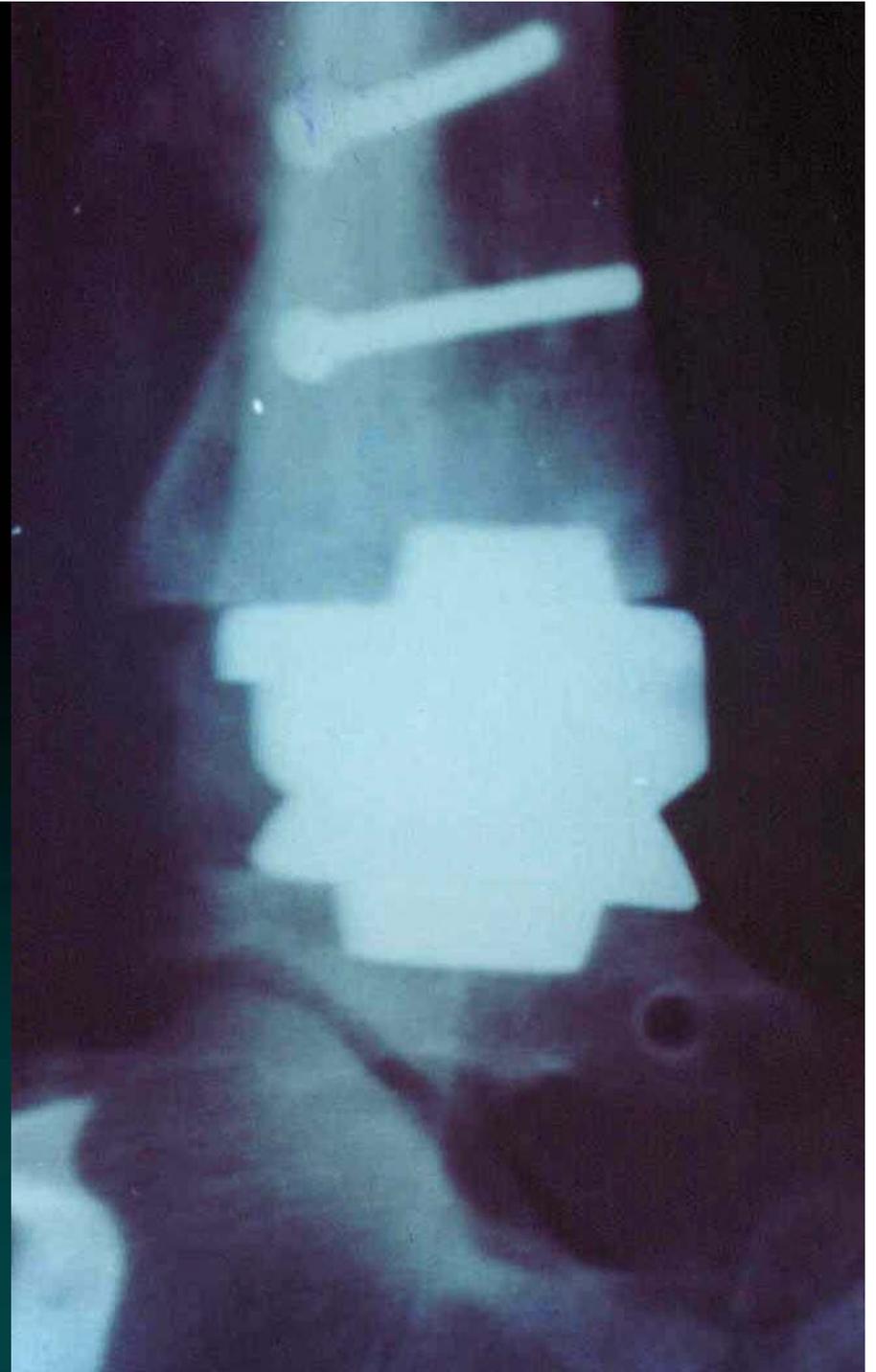
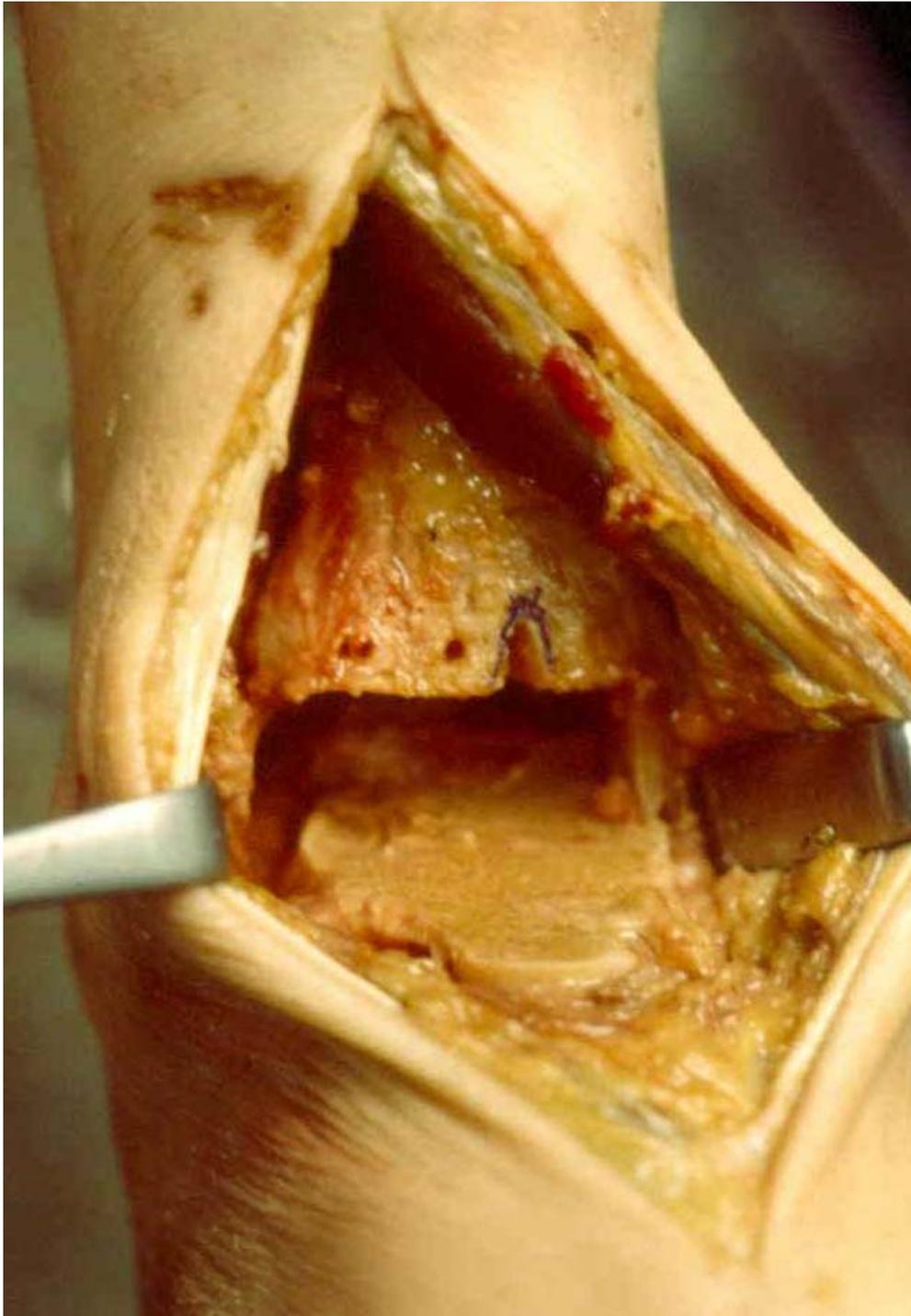
“The resection surfaces – especially on the tibial side – might be too weak to support the loads imposed by current prosthetic designs.”





BONE CUTS MUST BE CONSERVATIVE





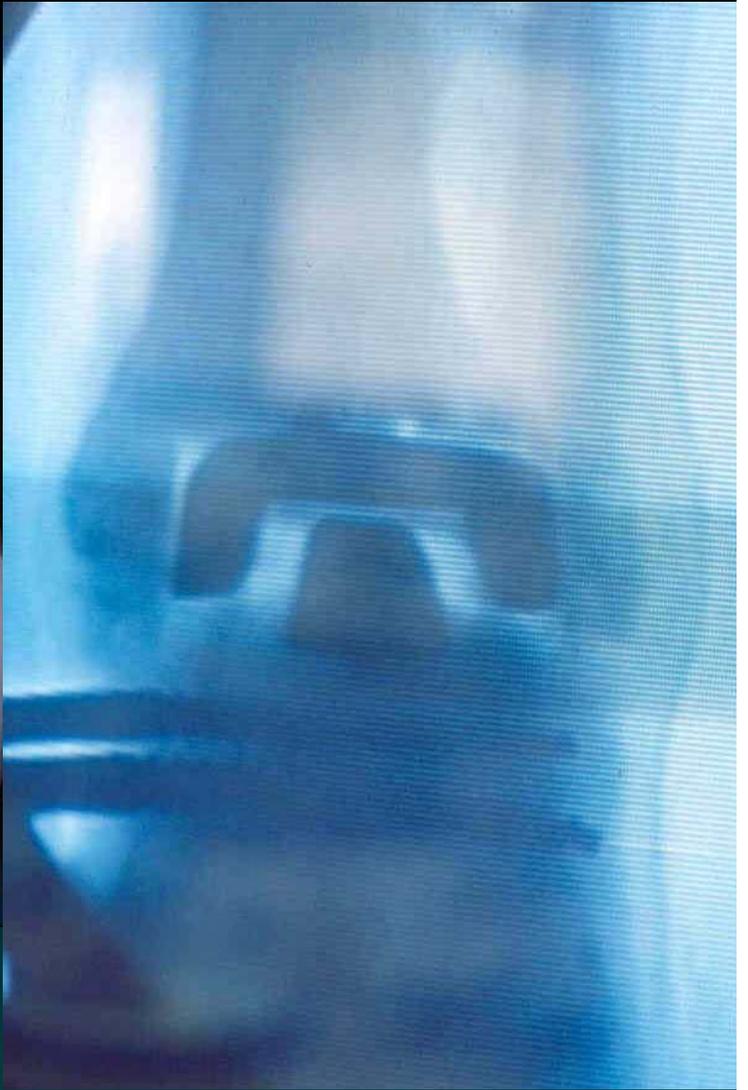
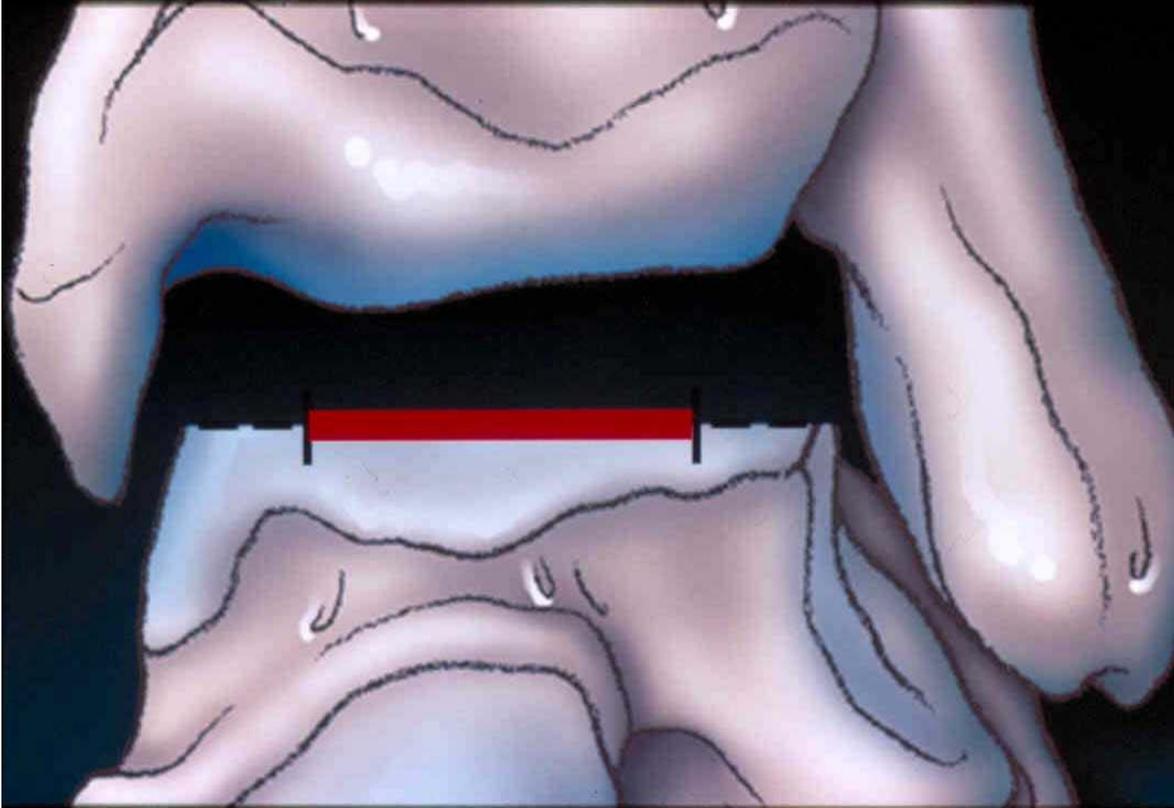
FORCES ARE MEASURED PER
SURFACE AREA

1 Newton = $\frac{1}{4}$ lb.

SPREAD OVER 1 m^2

EXPANDING SURFACE AREA FOR A
PARTICULAR FORCE LOWERS
FORCES PER UNIT AREA





STRONG BONE

Hvid, et al.; CORR, 1985

- **Pivot point**
- **Tilting**
- **Overload
Surrounding
Weaker Bone**

