01 Principles of Fracture Management

PRO TIPS

- FRCS (T+O) Exam – Make sure you are fluent using the AO Glossary (summary under, Other Resources – How to Describe + Fix Fractures)
- Old people do not generate much callus, so minimise fracture gaps, maximise fracture stiffness and construct durability.
- Children have enormous re-modelling potential but it is not magic. Beware of midshaft forearm fractures.
- If in doubt it is unlikely that you will make a fracture too stiff.

DISCUSSION TOPICS

- Biology of fracture healing
- Mechanics of fracture healing
- Non-union
- Paediatric fractures
- Systematic approach to fracture management
- Interpret imaging
- Fracture classification
- Mechanism of injury
- Residual soft tissues
- How to answer common FRCS (T+O) questions

RECOMMENDED REVIEW ARTICLES

- Elliott – Unified Theory of Bone Healing, BJJ 2016*
- Perren – Physical and Biological Aspects of fracture healing with Special Reference to Internal Fixation, CORR 1979*
- Perren – Evolution of the Internal Fixation of Long Bone Fractures, JBJSb 2002*

RECOMMENDED TEXTBOOK RESOURCES

Rockwood + Green Reference Chapters

01a Biomechanics of Fractures and Fixation
02a Bone, Cartilage and Tendon Healing
02p The Injured Immature Skeleton

SCORING / CLASSIFICATION SYSTEMS

AO/OTA