



HEALTH

Kwazulu-Natal

DEPARTMENT OF HEALTH

PROVINCE OF KWAZULU-NATAL

EDENDALE HOSPITAL

Department of Orthopaedic Surgery
<http://www.kznhealth.gov.za/ortho/default.htm>
Email.: rameshwar.gongal@kznhealth.gov.za

Main Road Edendale
Private Bag X509, Plessislaer, 3216
Tel.: 033 395 4911, Fax.: 033 395 4060 / 4660

Enquiries: MR R.N. Gongal

Date : 28 December 2006

Reference: **guideline 6**

GUIDELINES ON THE INITIAL MANAGEMENT OF COMPOUND FRACTURE

1. Resuscitation – ATLS principles
2. Tetanus toxoid /ATS
3. Antibiotics - according to the antibiotic protocol of Edendale hospital
4. Analgesics
5. Photographs, Wound washout, dressing and splints
6. Neuro-vascular assessment and documentation
7. compound fracture grading - Gustilo-Anderson classification system to be done intra-operative as well.
 - Grade I** - clean ,<1cm wound , minimal soft tissue injury, simple or minimally comminuted fracture
 - Grade II** - wound >1cm, moderate soft tissue injury, moderate contamination, moderate bone comminution
 - Grade III** – usually >10 cm, high contaminated wound, severe soft tissue damage, variable bone comminution.
 - Grade IIIA** - Adequate bone cover possible.
 - Grade IIIB** – Bare bone , no adequate soft tissue cover for bone .
 - Grade IIIC** – Circulatory compromise to the injured limb.
8. Relevant x-ray and lab investigation
9. Formal wound management in theatre
 - Tourniquet –to be used as needed.
 - Free drape
 - **Liberal wound washout**; Pulse lavage in cases of dirty wound –all the dirt and foreign materials, including that in medullary canal must be meticulously removed.
 - Debride all dead tissue.
 - Remove loose pieces of bone.
 - Achieve good haemostasis, but avoid excessive use of diathermy.
 - **Dry bone is a dead bone. Bone and tendon ,or joint must have adequate soft tissue cover.**
 - **Hydro-colloid dressing could be used as a temporary measure to cover the bare bone / tendon .**
 - Fracture should be reduced and maintained by use of appropriate internal or external fixation or splinting
 - **Proper documentation / Photographs and decision made for subsequent debridement / treatment.**

Review January 2008