

## Uganda Sustainable Trauma Orthopaedic Program

Visit: May 4 -17, 2009

### Activity

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#### Planning Workshop May 5, 2009

Framing of the Orthopaedic Trauma burden in Uganda  
Project planning with breakout sessions



#### Clinical activity

USTOP team took call every second day with OR days on alternate days

#### 1. Reduction/Casting Room cases (with Orthopaedic Officers):

144 patients (May 6 -15)  
80 patients on USTOP call days

Subsequently became evident that some orthopaedic trauma patients are managed by the Casualty Medical Officer without contact with Orthopaedic Officers – quantity unknown. (Orthopaedic Officers only involved with patients requiring splintage / reduction – i.e. pelvic #, some hip # dealt with by Medical Officer)

#### 2. Ward 7 OR cases

- 33 cases done in association with USTOP team in 6 operating days
- 24 femur fractures cases (2 bilateral) (2 femur / tibia)
    - 12 acute femur # (done within 48 hrs of admission)
  - 2 perilunate injuries (acute)
  - 1 talar neck # (delayed)
  - 1 distal radius # (delayed)
  - 1 medial condyle elbow injury (delayed)
  - 1 Monteggia #/dislocation (acute)
  - 1 ankle # (acute)
  - 1 AC joint separation (acute)
  - 1 MCP joint dislocation (acute)
  - 1 gastrocnemius rotation flap (tibial soft tissue injury ass. with femur #)

### 3. Casualty OR cases

17 cases

- open fractures tibia
  - forearm / wrist
  - hand
- lacerations      nerve
  - flexor / extensor tendon
  - skin
- osteomyelitis / pyomyositis / septic arthritis
- amputations



### **USTOP initiatives critical to the success of this pilot visit**

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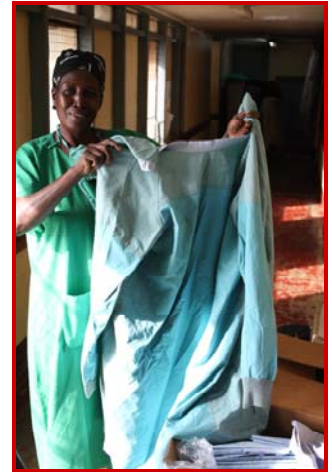
- presence of resident / fellow in casualty (USTOP fellow and Ugandan residents)
- direct admission of surgical patients to Ward 7
- early OR starts
  - dedicated nursing
  - USTOP anaesthesia
- surgical throughput
  - regional anaesthesia
  - USTOP surgical team (dedicated assistants)
  - post-anaesthesia recovery (PAR) nursing
- OR equipment
  - sundries brought by USTOP
  - additional nursing resources / expertise from USTOP

### **Recommendations arising from the pilot**

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1. Casualty OR requires major improvement
  - a. physical plant (lighting)
  - b. manpower (attending presence, assistants, nursing)
  - c. equipment / supplies
    - i. quality
    - ii. quantity
    - iii. organization
2. Continued increased presence of orthopaedic residents in Casualty
3. Development of care delivery teams (3) with increased ownership / responsibility for patients managed on their “watch”
  - d. orthopaedic officers
  - e. residents
  - f. attendings
4. Direct admission of stable patients requiring non emergent surgery to Ward 7 with aim of next day surgery
5. Dedicated Ortho Trauma resources
  - g. beds
  - h. OR time daily
  - i. anaesthesia
6. Development of care paths (eg. femur # / open tibia #) with preprinted orders

7. Improved Ward 7 infrastructure
  - j. lab capability
  - k. X-ray capability
8. Ward 7 OR
  - l. consistent emergency OR list process
  - m. improved education / vigilance / practice in regard to sterility
  - n. improved equipment management process / education
  - o. enhanced anaesthesia equipment / supplies (consistent with all OR facilities in Mulago)
  - p. implementation of WHO Safe Surgery practices (checklist)
  - q. dedicated PAR space / personnel
9. Information system
  - r. patient care
  - s. administration
  - t. quality improvement



## Future USTOP directions

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1. Advance team
  - a. education
  - b. equipment prep
2. Workshop
  - c. Start with topic of general interest – Emergency / ATLS assessment
  - d. Focused breakout sessions
    - i. anaesthesia block workshop
    - ii. principles and practices relating to sterility
    - iii. WHO Safe Surgery practice
3. Clinical focus
  - e. increased attention to Casualty OR functioning
  - f. less hands on Ward 7 activity (nursing and physician) – more education / process development
  - g. targeted equipment donation requests
    - i. linens
    - ii. external fixator pins
    - iii. K wires
    - iv. equipment / instruments for casualty OR
    - v. extremity drapes / sterile stockinettes
    - vi. focus on complete instrument sets with back-up inventory
    - vii. sterile gloves
    - viii. sutures – larger sizes 2-0 / 0 / 1 absorbable  
3-0 / 2-0 / 0 nylon
    - ix. fuses for tourniquet box
    - x. laundry dryer
4. Education
  - h. nursing education
  - i. increased resident education involvement

