ORTHOPAEDIC PATHOLOGY IN GHANA- A BIRD'S EYE VIEW.

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We have been told that taken a medical view of the world, sub-saharan Africa is still in the dark when it comes to the management of Trauma and Orthopaedic conditions. One major problem we see is the mentality of the people who make up this region as enshrined in the traditional and cultural believes which tends to directly influence their perception of injury and disease and consequently when and how they seek treatment. There is the spiritual aspect of life which some patients which almost always links their condition to mishap in life and make them seek spiritual consultation. The traditional treatments which are perceived to tow the line of the forefathers some of whom had successes in some cases and which therefore dictate the first approach to treatment which appears is appealing to the patient, often much closer to home and may involve payments which can easily be obtained from the house poultry or easily paid for by a close relative with the means, unlike western medicine which involves quite substantial bank notes. This is the reason why some of the cases which should present to the local hospital acutely, only surface weeks to even sometimes years down the line.

The economic situation has not helped matters also. Imagine that infant mortality, malnutrition, malaria are top of the pops in chart of killers in Ghana and that orthopaedic trauma condition falling slightly favourably below on the chart and how finance and health ministers would prioritise the budget for Orthopaedic Trauma care. Our snapshot observation across the country suggests that facilities, skilled personnel for Acute and Elective Care of the Orthopaedic Trauma in Ghana, appear woefully inadequate. The picture of the conditions under discussion on the wards and in the clinics tells it all. All told, there are multiple factors which explain the pattern and characteristics of disease conditions seen on the Orthopaedic Trauma wards in Ghana.

Motec Life-UK seeks to help draw attention to the current situation in Ghana and Sub-Saharan Africa. It would seem that most of the patients with Orthopaedic Trauma conditions are relatively young, bread winners of their family and getting them back to satisfactory recovery and working to acquire the wealth that may be necessary to improve death statistics in Ghana. Dr Addae, a Director of Health Statistics and Evaluation said at a meeting with Motec in Hemel Hempstead in March 2007, 'improving the health of Ghana will bring wealth to the nation' but certainly it will also cost lots of financial investment to achieve the wealth that every nation craves for.

This article is an overview of orthopaedic cases which presented at the St. Joseph's Orthopaedic Hospital at Koforidua, Ghana during a two week working visit of Motec in Ghana in April 2007, as observed on a single day orthopaedic out patient clinic session. We admit that the findings may not be the accurate representation of cases say in the teaching hospital but a lot of personal experiences by the authors working in Ghana and Nigeria for several years in the past provide us with the wealth of unwritten information about orthopaedic Trauma in Sub-Saharan Africa.

The orthopaedic hospital St Joseph's at Koforidua is a 200 bed unit and it is meant to act as a specialist centre, not only for Ghana but for the sub region with patients coming from all over West African. Patients from the West African sub-continent notably The Ivory Coast, Burkina Fasso and Nigeria attend for treatment, some of whom lodge in rented premises around the hospitals for months, waiting for a bed on the wards for their treatment.
Patients come on admission to the unit with various pathologies. Below are some of the cases on the wards as at 14th April 2007.

OUT-PATIENT SNAPSHOT SURVEY OF PATHOLOGIES, St Joseph's

AGE GROUP	SEX		PATHOLOGY
	M	F	
0-13	3	1	Chronic Osteomyelitis
0-2	2	2	Congenital Talipes Equinovarus
16	1		six months-Chronic Patella Dislocation
			Five years+ recurrent dislocation of proximal Inter
16-44	1	1	phalangeal joint of finger
13-60	3	4	avascular necrosis of the femoral head due to Sickle cell disease
40-70	3	4	chronic low back pain
50-60	2		severe spinal stenosis
55	1		chronic lumbar disc proplase with radiculopathy
45 -70	4	3	Knee Osteoarthritis
35-70	2	2	Hip Osteoarthritis...negative sickling
	1	2	Patellofemoral chondromalasia
			Fracture malunion
5	3	2	

IN-PATIENT SURVEY, KOFORIDUA

AGE	SEX (M/F)	DATE OF ADMISSION	PATHOLOGY	PROPOSED TREATMENT/MANAGMENT BY LOCAL SURGEON
29	M	29/03/2007	2yrs history-malunion left tibia-Post RTA	? treatment
47	M	21/3/2005	Osteoid osteoma	Need biospy
29	M	22/02/2007	Post RTA- left humerus # (has ex. Fix on) with left perilunate dislocation	No treatment outlined yet-Needs plating of left humerus
52	M	21/02/2007	# Left tibia/ lateral collateral ligament avulsion # right knee-post RTA	Nosugerical treatment needed
26	M	04/04/2007	6 weeks history of fracture neck of femur with Avascular necrosis	NO TREATMENT OUTLINED YET- WILL NEED THR
35	M	21/09/2006	Communicated left midshaft femoral #	Physio-NWB(none weight bearing)
49	M	22/02/2007	Malunion right humeral#- with radial nerve palsy-2months history	No treatment outlined yet-needs ORIF
19	M	06/02/2007	Compound fracture left femur with infected wound/ on external fixator	Not treatment required yet-daily dressing of wound/ antibiotics

40	M	27/09/2006	Compound communicated #Rt tibia on ex. Fix,SSG(Split skin graft-23/02/2007, got infected	No treatment outlined yet- will need tibialization of fibula
	F	11/06	Dislocated left hip	No outlined yet
	F	03/2007	Chronic osteomyelitis	Wound debridement,ex-fix,antibiotics
	F	04/2007	Right fracture neck of femur	Planned for hemiarthroplasty
	F		Coxarthrosis-right hip	Scheduled for girdlestone

Looking at these pathologies on admission the first thing that strikes me is their chronicity. These patients due to economic, cultural and traditional practises do not present on time. Some of them only came to the centre when they could no longer bear their deformities any longer.
The other thing which has complicated matters is the administration/ admission system in the hospital. Patients are admitted into the hospital with improper documentation of their pathologies and necessary treatment. Most times patients do not know when they will have their definitive surgerical procedures until the night before surgery. There seems to be no regular formal ward rounds in order for proper planning of treatment (both operative and conservative). Patients are on the wards for months without any form of treatment planned for them.

RECOMMENDATIONS

It is not enough to flag up problems in a system but it is noble and just to offer solutions to existing pitfalls in order for there to be an improvement in overall patient care.

Motec should as part of its responsibility and work in Koforidua to help:

1. Set up an efficient system of admission with patients thoroughly clerked at presentation and immediate review by the orthopaedic surgeon for planned definitive management.

2. Through education, the concept of regular ward rounds should be encouraged as this will further help in ensuring proper documentation of progress/follow up treatment of cases. This bridges the communication gap between the surgeons and the nursing staff.

3. As a charity group offering long distance trauma and orthopaedic relief, more should be done in the way of planning for orthopaedic surgery at Koforidua. A day or two before commencement of surgery a range of cases should be identified and surgery should be planned with patients.

4. For Motec to be effective there needs to be an expansion in the resources available to it, especially when it comes to having the necessary orthopaedic implants. As seen in the range of pathologies, the incidence of fracture mal-unions is high; this is due to the low level of operative orthopaedic surgery acute trauma cases. For instance, appropriate plates; screws; gamma nails; dynamic hip screw fixation and hemi-arthroplasty sets will be necessary in order for trauma management of patients to be effective.

5. Further more, special orthopaedic implants such constrained knee prosthesis etc. will be needed for complex orthopaedic deformity correction in patients with multi-ligament injury.