TRANSACTIONS SECTION

REGIONAL MEETINGS OF THE ASSOCIATION OF SURGEONS OF EAST AFRICA:

Abstracts Of Papers Presented

Nakuru, Kenya 2nd-4th March 1995

ROTATION OF SURGICAL REGISTRARS WITH AMREF

T J I P RAASSEN, NAIROBI, KENYA

From May 1990 to August 1992 the possibility of rotating surgical registrars with the African Medical and Research Foundation (AMREF - the East African flying doctor service) was discussed with the Department of Surgery of the University of Nairobi. The registrars would accompany an AMREF consultant surgeon on his visits to district and mission hospitals in East Africa for three months.

There were a few conditions such as:
accommodation and food would be provided by the hospitals or AMREF, there would be no allowance for the registrar, after the rotation the registrar would write a report.

We have experienced the following problems:
1 difficult communications between the Chairman of the Division of Surgery and AMREF,
2 late publication of the rota,
3 because we visit each hospital once every three months the registrar does not know the outcome of the operations performed. The same applies to the histology reports.

The scheme has the following advantages:
1 exposure of the registrar to:
conditions in district and mission hospitals, simple and effective forms of anaesthesia, a wider variety of surgical conditions, and to new developments;
2 direct exchange of ideas between the consultant and registrar;
3 increased contact between the registrars and the staff of the hospitals which has resulted in several locum appointments at mission hospitals;
4 the possibility of helping more patients.

We believe that this is a valuable scheme of great benefit to both the surgical registrars and to AMREF.

CLUB FOOT AT KENYATTA NATIONAL HOSPITAL

J A O MULIMBA, NAIROBI, KENYA

Club foot of the congenital talipes equinovarus variety is the commonest congenital abnormality seen in the orthopaedic clinic at Kenyatta National Hospital. Between 1st January 1988 and 31st December 1993, 189 patients with 307 club feet were seen. This excluded those children with other predisposing factors. There were 125 males and 64 females (sex ratio M:F;2:1). The bilateral affection was 1.5:1 compared with unilateral club foot. Left and right feet were equally affected in unilateral cases. The first or second born were most affected, 125 out 189 (65.6%).

Treatment was started early with 124 out of 189 (65.6%) having started treatment by the fourth week. The first operative treatment was not started until

the age of 3 months. Operation rate was 161 feet out of 307 feet (52%). There was a recurrence in 46 (28.6%).

Moshi, Tanzania 15th-17th June 1995

SINGLE-LAYER ANASTOMOSIS IN THE ALIMENTARY TRACT: A TANZANIAN EXPERIENCE

QUINGSI HE, M R AZIZ, FABE QIOU and J MALLIWAH, DAR ES SALAAM, TANZANIA

This was a prospective study of 19 anastomoses in 17 patients who were operated upon between September 1993 and May 1995 for a variety of gastrointestinal pathologies for which resection was done.

Anastomoses were done in a single layer using absorbable suture material (polyglactin). Thirteen were interrupted and six were continuous suture anastomoses. The sites of anastomoses were gastroduodenostomy (1), gastrojejunostomy (7), small intestine anastomoses (4), ileocolostomy (1) and colostomy closure (6). All patients were closely observed after operation and no anastomotic leakages were detected clinically. There were no deaths. It is concluded that single-layer gastrointestinal anastomosis is safe, simple and economical.

THE AIDS PROBLEM IN SURGICAL SERVICES: PREVALENCE AND PRECAUTIONS AT KCMC

S C CHIGULU AND F MADINDA, KILIMANJARO CHRISTIAN MEDICAL CENTRE, MOSHI

The surgeon faces risks of HIV and Hepatitis B infection. This paper explored the HIV infection rate, both suspected and unsuspected, in patients undergoing surgery. HIV serological screening was done prospectively between January 1985 and December 1991 on 400 HIV suspected patients and 800 unsuspected patients undergoing surgery. Thirty-five attending staff were also screened in 1986 and 1991.

Of the 400 patients presenting for surgery and suspected to have HIV infection 148 were found to have positive serology for HIV: an infection rate of 37%. Another 19(2.4%) of patients from the 800 control group tested positive for HIV.

From the results it is very important that the surgeon has a high suspicion index so that HIV infected patients are diagnosed before contamination of operating room staff, ward nurses and other patients. It is also very important that correct surgical criteria are used to select seropositive patients who could benefit from the surgical treatment without being tipped into full-blown AIDS disease.

HEPATIC LOBECTOMY FOR HEPATOCELLULAR CARCINOMA: A CASE REPORT

S G CHUGULU AND F MADINDA, MOSHI, TANZANIA

Treatment of malignant hepatic tumours by surgical resection is uncommon because most of the tumours are multicentric and are diagnosed late. A few hepatic neoplasms, however, present with a single tumour or few nodules confined to one lobe. Usually these are slow growing tumours. The favourable anatomical location and slow progression render them treatable by surgical resection.

We reported a case of hepatocellular carcinoma of the left lobe in a 17-year old African male. He complained of painless epigastric swelling for four years. Ultrasound revealed two confluent echo-

dense masses in the left lobe. The diagnosis of hepatocellular carcinoma was proven by needle biopsy. Although there was a total delay of nine months from presentation, a left hemihepatectomy was successfully performed. The histological diagnosis was confirmed and the omental and pancreatic nodes were free of tumour. One month later a chest radiograph and ultrasound of the remaining liver were normal.

THE OBSTETRIC FISTULA REPAIR PROGRAMME IN PCEA KIKUYU HOSPITAL

T J I P RAASSEN AND Z P QURESHI, NAIROBI, KENYA

The objectives of this programme are:

1 to reduce the backlog at Kenyatta National Hospital by operating on approximately 50 patients a year, and
2 to train the gynaecologists and postgraduates in VVF-surgery.

The programme started in June 1994 and data on the first 33 patients were presented.

The fistulae are classified as follows:

1 fistulae not involving the closing mechanism of the bladder (11 patients)
II fistulae involving the closing mechanism:
  A without (sub)total involvement of the urethra (21 patients)
  B with (sub)total involvement of the urethra (1 patient)
III miscellaneous fistulae, eg uretero-vaginal (1 patient).
(One patient had both type IIA and III fistula).

88% developed the fistulae under the age of 25 years. 61% were primipara and 27% were para 2. Twenty-seven of the babies were stillborn, and the other six babies died within 11 days. Twenty-three of the women (mostly primipara) were either unmarried, or not living with their husbands.

In the 20 women undergoing a first repair, 19 fistulae were closed. Thirteen women had 43 previous attempts at repair and in these 11 fistulae were closed in 16 operations. Of the five concurrent recto-vaginal fistulae, 4 were closed in 6 repairs. Ten women were operated upon by a gynaecologist in training with nine successful closures. So far we consider the results are acceptable.

Xai Xai, Mozambique 14th-16th September 1995

POSTOPERATIVE OSTEOMYELITIS AT THE DEPARTMENT OF ORTHOPAEDICS, MAPUTO CENTRAL HOSPITAL, DURING 1991.

M SCHMAUCH, C MACAULEY AND J CARBALLEDO, MAPUTO, MOZAMBIQUE

We reviewed the files of 355 patients submitted to clean bone surgery during the year 1991. In 12 cases (3.38%) postoperative osteomyelitis was diagnosed.

The incidence of postoperative osteomyelitis for different surgeons varied between 0% and 22.2%. The operations with the highest complication rates were arthrodeses of the ankle and subtalar arthrodeses (50%), plate-osteosynthesis of diaphyseal tibia fractures (20%), tibial plateau fractures (11.1%), Kuntsher nailing in diaphyseal femur fractures (5.6%) and fractures of the forearm (4.8%). The frequency increased with operation time.

We reviewed a previous study[1] from our department from 1987, when the incidence of postoperative

osteomyelitis was 12.4% and analyzed the reasons for the significant improvement. Proposals were made for reducing the incidence of postoperative osteomyelitis.

Reference

Schmauch M Postoperative osteomyelitis after clean orthopaedic operations at Maputo Central Hospital *Proc Assoc Surg East Africa* 1991; 14:6-9.

TREATMENT OF TUBERCULOSIS OF THE HIP

L N GAKUU, NAIROBI, KENYA

This paper appears in full text in this issue of the journal.

THE NATURAL HISTORY OF SEPTIC ARTHRITIS OF THE HIP IN CHILDREN

M SCHMAUCH AND A MUJOVO, MAPUTO, MOZAMBIQUE.

We presented 26 hips with severe sequelae after septic arthritis in 25 children (<14 years), treated at the Department of Orthopaedics between January 1993 and June 1995.

The sequelae observed were total destruction of the head and neck of the femur with dislocation of the hip (3), epiphysiolysis with septic necrosis of the head of the femur (5), septic dislocation of the hip with complete or partial destruction of the head of the femur (12) and destruction of the articular cartilage (6).

Many of the patients had been treated for weeks or months at other institutions before transfer. These severe complications could have been avoided by early diagnosis and adequate surgical treatment. Others came for treatment too late with severe sequelae already established.

The importance of early diagnosis and aggressive surgical treatment, in order to avoid severe complications of septic arthritis of the hip was stressed.

MEETINGS OF THE SURGICAL SOCIETY OF ZAMBIA

Nkana Mine Hospital, Kitwe, 25th March 1995

DIAGNOSTIC PERITONEAL LAVAGE FOR BLUNT ABDOMINAL TRAUMA VICTIMS IN DEVELOPING COUNTRIES.

B F K ODIMBA, LUSAKA

An analysis of the use of diagnostic peritoneal lavage (DPL) in 185 patients with blunt abdominal trauma and a review of the literature was presented. The incidence of trauma victims is increasing in developing countries, especially in the larger cities where trauma is a leading cause of death for persons under 40 years.

Unrecognised abdominal injury represents the most frequent cause of preventable death in blunt trauma patients. Physical examination alone, even repeated by an experienced surgeon, may not always be informative. Peritoneal signs may be overshadowed by other injuries or masked in patients with diffuse pain (children), or altered consciousness (intoxicants or head injury).

In such trauma victims, open DPL has proved a reliable diagnostic tool with sensitivity (82%); specificity (92%); accuracy (91%) as well as to its positive and negative predictive values respectively of 95% and 93%. The author has observed very few cases of unnecessary laparotomy (3%). DPL is

safe (no mortality due to DPL in this series), easily and rapidly performed (15-30 minutes depending on availability of a set), repeatable and far cheaper than other diagnostic modalities (ultrasound, CT scan, angiogram etc). It can and should be practised in any hospital in developing countries.

COMPARATIVE THERAPEUTIC TRIALS IN INFLAMMATORY DISEASES OF THE UPPER DIGESTIVE SYSTEM

B F K ODIMBA

We treated 560 cases of inflammatory disease of the upper digestive system, all confirmed by fiberoptic endoscopy, between May 1986 and December 1994. These included gastroduodenal peptic ulcer (264), gastritis (232) and oesophagitis (64). Protocols of treatment and follow-up had been established and were applied according to the nature, site and stage of the lesions.

Reflux oesophagitis responded well to medical treatment and recurrent and complicated cases were relieved by oesophageal dilatation or by an anti-reflux procedure undertaken by an abdominal approach.

In gastritis, results were hardly satisfactory (70% improved) even with the use of cyto-protectors such as Sucralfate. Resistance or recurrence occurred in 58% and we consider that a better classification of gastritis is needed.

In gastric peptic ulcer, medical treatment, including cyto-protectors improved 60% of patients while partial gastrectomy gave 85% good results. Resistant and recurrent cases after H_2-receptor blockade in duodenal peptic ulcers were treated by vagotomy which gave good results in 93%.

GALEAZZI FRACTURE

R N DAS, CHINGOLA

If not recognised early and adequately treated, Galeazzi fractures produce a weak grip with stiffness and ugly deformity of the wrist.

A 65-year-old man reported eight months after injury to his right wrist. Initial treatment had been given in a district hospital. On examination there was marked radial deviation of the wrist, which was stiff and painful. His grip was weak and he had lost sensation in the ulnar nerve distribution. Radiographs showed a non-union of the distal radius and disruption of the inferior radio-ulnar joint.

A 21-year-old Zambian man was seen four weeks after injuring his left wrist during a game of football. Again, he had sought treatment at a district hospital. On examination the wrist was deformed, stiff and painful with a poor grip. Radiographs revealed a healing displaced fracture of the distal radius with dislocation of the inferior radio-ulnar joint.

Both cases were treated by open reduction, cancellous bone graft and fixation using six-hole plates. The lower end of the ulna was excised in the first patient because it was preventing reduction of the fractured radius. In both cases the fracture healed soundly within three months and the grip and range of movement of the wrist were much improved.

Galeazzi fractures are best treated by adequate open reduction of the fracture and prolonged above elbow POP cast with the forearm in full supination. In children, closed reduction is often possible but needs prolonged immobilisation until the fracture soundly heals. When reduction is not satisfactory, open reduction without fixation and an above elbow POP cast gives satisfactory results.

COMPARATIVE STUDY OF ECTOPIC PREGNANCY IN FOUR HOSPITALS ON THREE DIFFERENT CONTINENTS.

F ROBIANA, LUSAKA

One hundred and eighty-five cases of ectopic pregnancy, diagnosed and treated in four hospitals on three different continents were studied in the two years from 1st January 1986 to 31st December 1987. The hospitals were: Livingstone General Hospital, Zambia, The Emique Cabrera Central Teaching Hospital and the 10 de Octobre Maternity Teaching Clinic of Havana City in Cuba and the Charite General Teaching Hospital in Berlin, Germany. The study showed the results of diagnostic and therapeutic methodology carried out in these hospitals at which the author had the opportunity to work.

The total number of deliveries in the whole study was 31,151 giving a frequency of one ectopic pregnancy per 168 deliveries. The importance of the patient's age, past history of pelvic inflammatory disease (PID), appendicitis, endometriosis, infertility treatment and the use of intra-uterine contraceptive devices (IUD) was pointed out. Four cases of rare types of ectopic pregnancy (2 abdominal full term, 1 heterotopic and 1 ovarian) were presented.

Of 202 women operated upon for ectopic pregnancy, the diagnosis was correct in 185, giving a rate of 91.58%. In spite of the differences of diagnostic methodology, some conclusions can be made.

1 In Africa, a continent where a lot of predisposing factors for ectopic pregnancy occur, there is very little literature about this interesting subject.

2 Ectopic pregnancy continues to occur in the age group of maximum reproduction (19-35 years).

3 Amenorrhoea is an important symptom when it is present, but its absence does not rule out the diagnosis.

4 The background of PID, treatment for infertility and of a previous ectopic pregnancy is very important in order to reach the diagnosis.

5 The symptomatic triad of amenorrhoea, lower abdominal pain and bleeding was present in only 22.1% of all the cases.

ONE-STAGE SIGMOID COLECTOMY IN PATIENTS WITH VOLVULUS

K L YERZINGATSIAN, LUSAKA, ZAMBIA

The management of volvulus of the sigmoid colon is controversial. Reports indicate a recent move towards a one-stage sigmoid colectomy and this paper reports a series of 38 one-stage sigmoid colectomies performed by one surgeon in Lusaka, Zambia. Ages of the patients ranged from 21 to 84 years. There were 37 male and one female patients.

Late admission was common. In 24 patients a one-stage sigmoid colectomy was performed following resuscitation and emergency laparotomy while the other 14 operations were performed as elective procedures. Sigmoidoscopic reduction was attempted in 14 patients but often failed. The overall morbidity (mainly wound infections) was 24%. Gangrene of the sigmoid colon was commonly associated with late admission. Eight patients had symptoms lasting a week or more and seven of these were found to have gangrene of the colon. All four deaths occurred in this group of patients. The overall surgical mortality rate was 10.5% which is low compared with most other series.

University Teaching Hospital, Lusaka, 4th-5th November 1995

PROTOCOL FOR TREATING JEHOVAH'S WITNESSES WITHOUT BLOOD

J KABOTOLO

Jehovah's Witnesses object to blood transfusions primarily on religious grounds. They and their children do not accept homologous whole blood, packed red cells, white cells, plasma, autologous blood (except in haemodialysis) and major blood fractions. This position is non-negotiable. This stand gave them an opportunity to become aware of alternatives long before current anxieties about blood transfusions became known.

To defuse any possible confrontation with doctors and unprofitable litigation, Hospital Liaison Committees for Jehovah's Witnesses have been set up in all major cities of the world, including Lusaka. The presentation was aimed at soliciting the co-operation of doctors to treat Jehovah's Witnesses without blood. We would like to work closely with doctors in seeking medical alternatives in the local hospitals.

Whenever the issue of blood transfusion arises in any case with a Witness, the doctor should first of all review alternatives to blood transfusion and treat the patient with these (a long list of alternatives and techniques was shown). A doctor may wish to consult with more experienced doctors at the same facility or transfer the patient into the hands of such a doctor. The worldwide network of Jehovah's Witnesses offers an opportunity to doctors to get in touch with more experienced doctors in other countries.

Hospitals have thus managed to start programmes in bloodless surgery. Confrontation, adverse publicity and long hours of fruitless arguments are thus avoided. Both doctors and patients benefit.

CONTRIBUTION OF ENDOSCOPY IN THE MANAGEMENT OF UPPER GASTROINTESTINAL TRACT DISEASE

B K F ODIMBA, LUSAKA, ZAMBIA.

The author analyzed retrospectively 601 cases of initial upper digestive system endoscopy (UDSE) performed by him with fibre-optic devices between May 1986 and December 1992 in three medical institutions in Shaba Province, Zaire.

Patients, materials used, endoscopy procedure, protocols of management and results were reported. Utilisation of USDE increased in the author's practice from 44 cases in 1987 to 159 in 1992.

In the 601 cases, there were 248 males and 353 females (M:F;3:4). The youngest patient was 14 years old and the eldest 60 years (mean 34 years).

The main indications for UDSE were epigastric pain (77%), diffuse and chronic abdominal pain (10%), haematemesis (6%) dysphagia (2%) and melaena (2%). The main endoscopy findings (n=601) were gastritis (253), peptic gastro-duodenal ulcer (133), normal bowel (116), oesophageal junction abnormalities with or without reflux (65) oesophageal varices (10) benign tumours (8) and malignant tumours (8).

FACTORS WHICH INFLUENCE OUTCOME IN LOCAL ANAESTHESIA

K L YERZINGATSIAN, LUSAKA, ZAMBIA

Premedication is important in the management of patients who are to have surgery under local anaesthesia. In addition to the premedication there are other less obvious factors which influence the patient's response to surgery. This study was undertaken to analyze these factors. One hundred and sixty-nine consecutive patients were included

in this study and the response of each patient was categorised into one of five categories: perfect, excellent, very good, good and fair.

The results were as follows: perfect 58, excellent 55, very good 36, good 14, fair 3 and unrecorded 3.

The reasons for the low categorisation in the 10% of patients who were categorised as "good" or "fair" were: the lack of premedication or inappropriate medication 13, unsuitable carrier fluid 13, anxiety 7, expired or poor quality adrenaline and lignocaine 5, low pain threshold 2 and technical factors 2.

SIDE-TO-SIDE STAPLED ANASTOMOSES IN GASTRO-INTESTINAL SURGERY

B F K ODIMBA, W E AMADI, S KABIR and S SYAKANTU, LUSAKA

Staplers now have a wide application in general surgery worldwide. One the authors (BFKO) performed more than a hundred stapled gastro-intestinal anastomoses in the University Hospital of Amien, France, between 1976 and 1985. In order to promote this safe suturing technique at the University Teaching Hospital, Lusaka, five of the ten cases of side-to-side stapled gastro-intestinal anastomoses carried out in the Department of Surgery between 1st June 1994 and 30 May 1995 were presented.

Stapler models TA55 and TA90 (*United States Surgical Corporation)* were used respectively for closure of the duodenum and of the small intestine. Stapler model GIA was used for side-to-side anastomoses in Billroth II procedures, gastrojejunostomy and enterostomy during type omega jejunostomy. The main indication was gastroduodenal stenosis complicating tumours or peptic ulcers.

All the patients operated upon, even those in poor general condition, did well and were discharged from the ward within 10 days. There were no complications. The authors advocate the promotion of auto suture stapling, especially in the precarious patient and also to prepare tomorrow's surgeons for laparoscopic surgery.

A GOOD OUTCOME FROM FAT EMBOLISM COMPLICATING MULTIPLE FRACTURES

B F K ODIMBA AND J MULENGA, LUSAKA

The fat embolism syndrome is a serious and potentially life-threatening complication of long bone fractures. The authors reported a fortunate outcome.

A 17-year-old girl, involved in a road traffic accident, was admitted with displaced ipsilateral femoral and tibial fractures and contralateral fractures of the ischial and iliopubic rami. Head, neck, chest and abdomen were uninjured and there were no signs of serious bleeding. After parenteral dextrose-saline infusion, the fractures where reduced by manipulation and stabilised with a plaster cast incorporating a trans-tibial Steinmann pin. Oral diet was allowed after complete recovery from general anaesthesia.

On the third day, the patient developed fever, shortness of breath, petechial skin haemorrhages and lost consciousness. A clinical diagnosis of fat embolism was made. Management included oxygen by mask, maintenance of the haemodynamic and electrolytic status, parenteral energy support, urinary catheter, nasogastric tube and antibiotics. Because of prolonged fever and drowsiness, and the development of pressure sores, internal fixation of the tibial and femoral fractures was carried out. The

patient did very well and was discharged from the ward, afebrile, fully conscious, alert and walking with crutches.

Recent literature suggests that the incidence of fat embolism syndrome may be higher than commonly thought. There is a variety of causes and various theories of pathogenesis and prevention exist but of prime importance are recognition of the syndrome, supportive treatment, effective stabilisation of fractures and care of other injuries.