Mauritius

Paediatric Service Training
for
Urology/Surgery, Nursing and Anaesthesia

14th – 30th November 2006

Professor Paddy Dewan, Dr Hosany Nazeer, Dr Ken Brownhill and Rn Caron Oakley

A project of the Mauritius Department of Health and Quality of Life,
The Society for Children Inoperable in Mauritius,
And the Kind Cuts for Kids Foundation

Overview

There have now been seven Paediatric Surgical visits to Mauritius from Australia to develop the services for children. On this occasion, 128 consultations were conducted, starting with a clinic of 76 patients on the first day. A total of 121 patients had 98 operations during 63 anaesthetics given to 60 patients; bringing the total number of operations conducted since 2001 to 349 operations, during 269 anaesthetics on 176 patients. The difference between the number of patients and the number of anaesthetics results from many of the patients requiring more than one procedure for major anomalies, particularly the more than 70 patients with an abnormality of their lower bowel.

Importantly, Dr Hosany Nazeer was part of the Australia visiting team, and Dr Anwar Fakim continued his role as Mauritian coordinator. The junior medical staff, the theatre and ward nurses, the radiologists and radiographers and the anaesthetic staff performed magnificently to enable over 100 hours of surgery to be carried out.

Again, it was noticed that there have been advances in the service to children with surgical disease in Mauritius; the patients are now younger and are less likely to have had complications from previous surgery. Also, there has been an increase in the teaching component with two lectures given by Dr Ken Brownhill (the Anaesthetist of the team), and four lectures moderated by Professor Dewan. Also, an audit of the 121 patients and their outcomes was conducted at the end of the visit, demonstrating the important lessons learnt, and providing a further opportunity for education session of the junior medical staff, plus interaction between the Surgeons and Paediatricians.

Great advances have been made, but there are still changes needed. Instruments in theatre, theatre processes, radiology protocols and community awareness of bladder and renal disease need to be developed, and there needs to be a country-wide approach to the surgical services for children. To assist with these further developments, discussions were had with the Minister, the Chief Medical Officer and other staff of the Department of Health & Quality of Life, with the prospect of ongoing involvement of Kind Cuts for Kids in the planning.

In addition to the support from the Ministry and the Hospital staff, support was provided by SACIM Mauritius, and the Australian High Commissioner, Ian McConville, and his staff. The Mauritian media also provided support, thus further informing the community of the service now available in Mauritius.

In the future, it is expected that there will be Mauritian service providers for Paediatric surgery, in dedicated facilities, with the possibility of Mauritius becoming a regional centre of excellence for children's surgery, facilitated by the current outreach program from Australia extending to involve Madagascar. With this end in mind, productive discussions have already been held with both the Health Department in Mauritius and the Madagascar ambassador, and a further visit of a Paediatric Surgical team is expected in mid 2007.

The Australian High Commissioner (His Excellency Ian McConville – centre foreground [left]: front left [right]) not only visited the ward during the Ministerial visit, but also took the opportunity to see the Australian team of Professor Dewan, Dr Hosany Nazeer, Dr Ken Brownhill and Nurse Caron Oakley at work in the operating theatre. The Minister, the Honourable Satya Faugoo, and Professor Dewan discussed the condition of patients in the ward during the Ministerial visit to the ward (centre foreground [left]).

Consultations

As usual the first day clinic was busy, during which the majority of cases were seen, many of whom had a radiological investigation and a later review. Other children were seen between operative cases, with a total of 121 patients being seen in total. Importantly, a large number of new cases were seen, as well as patients who required further surgery or review of the outcome of previous complex anomalies and surgery.

The initial clinic ran like clockwork: Seventy-six patients were methodically clerked, examined and assigned to further care with the assistance of many junior staff, nurses and medical record staff. Investigations were organized in a timely fashion and appropriate patients were admitted for surgery. This major clinic had the involvement of the Jeetoo senior and junior surgical staff and the participation of members of SACIM. Also, Dr Brownhill was able to assess the patients' fitness for surgery, following the decision to operate, and Caron Oakley assisted in recording the necessary follow-up of the patients.

The cases seen in the clinics and in the ward included 24 children with an anorectal anomaly, 32 hypospadias boys, 11 with Hirschsprung's or constipation, 3 with bladder exstrophy/epispadias, 15 with urethral obstruction (COPUM), Colon atresia associated with Down syndrome, diaphragmatic eventration (2), 3 renal stone disease patients, 11 with a neuropathic bladder, 6 with obstruction at the junction between the pelvis and

ureter of one or both kidneys, 5 boys with testicular anomalies, and assorted other renal anomalies. Some patients had more than one anomaly.

Jorelle was the boy who started the Mauritian Paediatric Surgical trips. His visit to the clinic recently, and subsequent investigation, confirmed an excellent out come from his anorectal anomaly.

Surgical Cases

A total of ***98 operations*** were performed on ***60 patients:*** the major work load came from:

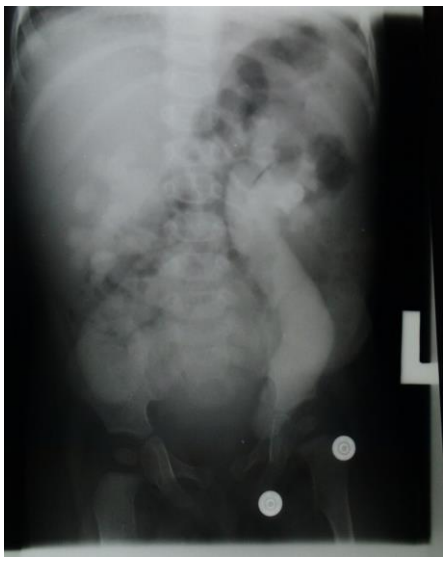
Hypospadias repair	16 cases
Pena type procedure	7 cases
Swenson procedure	2 cases
Urodynamics	8 cases
Cystoscopy +/- fulguration	13 operations

Other cases included one anal dilatation, colectomy, colostomy closure, lithotomy, diaphragm repair, orchidopexy for undescended testes, nephrectomy, bladder augmentation with ureter, vesicostomy, and one boy who hade the excision of a complex, recurrent thyroglossal cyst.

Of the patients who had surgery, or were reviewed in the clinic, 30 patients will require some form of surgery next year.

A small, but important number of complications occurred, including missed pre-operative anaemia in two patients, post operative fever in four, urine infection in one, delayed catheter removal in one and a return to theatre for the combination of a post operative bleed and catheter malfunction. Complications of previous treatment included urethral fistula repairs in two and a distal stricture in one. Other complications from elsewhere were complete urethral occlusion in a child treated overseas, and missed bladder dysfunction in two patients with consequent renal failure.

Ghurburan was born with a blockage to the flow of urine from his bladder. He had the blockage cleared during a previous SACIM/Kind cuts for kids supported Mauritian Ministry visit and, during the 2006 Paediatric Surgical mission, had his bladder enlarged with one of his ureters; a successful operation that took four hours and significantly reduced his risk of future renal failure.



Peerboccus was born with an imperforate anus requiring the formation of a colostomy; therefore he wears a bag on his abdomen to collect his bowel motion. A kidney ultrasound and xrays showed him to also have significant kidney damage resulting in a life threatening infection. Surgery by the visiting team has saved his kidneys, and next year we will reconstruct his bowel, to allow him to poo normally

Future Direction

1. A Paediatric Surgical symposium for GP's and Paediatricians.
2. Paediatric Radiological training for Radiologists and Paediatricians.
3. Development of a Paediatric Surgical centre or centres, according to the findings a scoping study.
4. Dr Nazeer Hosany has elected to stay on in Australia for 2007.
5. In 2007, Dr Hosany will return for the Mauritian Paediatric Surgical visits.
6. Cases to be considered for transfer out of Mauritius should be vetted by those closely involved with the Paediatric Surgical visits.
7. Strengthening of the auditing process commenced during the November 2006 visit is desirable.
8. Mauritius should aim to become a regional centre of excellence to ensure ongoing quality of care in Paediatric Surgical practice.
9. The University, the Department of Health and Quality of Life and the surgical community should work toward developing a diploma exam in Paediatric Surgery.
10. A second candidate should be identified for surgical training.

It remains important that the community recognizes that the subspecialty Paediatric Surgery is now available in Mauritius. The SACIM group should continue to be recognized for their contribution to the development of the specialty, through having made the link in the first instance; now they have disbanded, the Surgical and Paediatric medical communities should become more involved in the strategic planning for the development of the service.