

Paediatric Radiology and Urology Teaching Program

4th – 13th August 2016



Dr Paddy Dewan and Dr Padma Rao

A project of Kind Cuts for Kids, in combination with the University of the Free State Medical Faculty, Cape Town University and the Red Cross Children's Hospital, South Africa

Introduction

Kind Cuts for Kids has been involved with the Urological and Radiological community in South Africa since 2008, with the latest visit being the sixth year, three years of which have included contributing to the South African Urological conference.

The trip to South Africa has included the 2nd Bloemfontein Paediatric Urology workshop and involvement in clinical teaching and operating at the Red Cross Hospital in Cape Town.

The clinical work across the two centres included assistance with the management of 11 patients, in – three females; eight males: six children in Bloemfontein; five in Cape Town. Of the 11 patients, seven had surgery, including three for obstructed kidneys, one for hypospadias, one for epispadias and two for bladder exstrophy – a total of 17 operations were performed during the seven anaesthetics. Compared to most Kind Cuts for Kids missions, the number of patients has been small, but the significance of the visit no less impressive, as understood by insight into the size and nature of the audiences at each of the two centres, and the number of lectures given as part of the teaching program.

Bloemfontein

The visit to Bloemfontein was 7th – 10th August 2016, as part of the “The Second Paediatric Urology & Radiology Workshop and Symposium”, hosted by Dr. Freddie Claassen, Department of Urology, Faculty of Health Sciences, University of the Free State, Bloemfontein. The two day programme was a combination of live operating, video-linked to an interactive audience, and with the procedures videotaped for future reference; additional interactive sessions while the surgery was underway, and lecture series.

After arriving on Sunday August 7th 2016, a ward-round of the potential patients for the live operating session were reviewed, along with their radiology, following which there was a welcome reception to introduce the registrants to the faculty members, and to facilitate networking between those interested in Paediatric Urology. Four delegates were partly sponsored by a grant from Kind Cuts for Kids.



The group of successful candidates for the Kind Cuts for Kids scholarship. The funds facilitated attendance at the 2nd Bloemfontein Paediatric Urology Conference, at which practical education and networking were achieved with those seen in the second photo.

Bloemfontein invited International and local Faculty

Dr Paddy Dewan

Dr Padma Rao

Prof J Lazarus, Head Urology, Red Cross Children's, Cape Town

Dr A Adam, Urologist and Paediatric Urologist

Dr I van Heerden, Pediatric Urology, Pretoria Academic Hospitals.

Dr Mohammed Colia, Endourologist.

Dr S Smith, Pediatric Nephrologist, UFS, Bloemfontein.

Bloemfontein 2nd Paediatric Urology Symposium

The Welcome Reception was held on the evening of Sunday 7th August at the Botanical Gardens. This was a good opportunity to meet all the delegates from the different African countries. There were between 40 and 45 delegates attending the symposium. Kind Cuts for Kids offered scholarships to trainees which paid for their registration; the trainees were required to provide short submissions which were judged by Dr Dewan. There were five successful submissions and the winners were notified of their success.

Monday August 8th 2016: The day started with a breakfast seminar at 7.00am, with Dr. Padma Rao presenting a lecture on "Ultrasound of the Urinary Tract in Children: Signs & Diagnosis". The main focus of the lecture was to provide practical tips to the surgeons on how to perform Ultrasound in their clinical setting, imparting knowledge on how to optimise the scan to maximise the information gained. The lecture was very well received and stimulated much discussion.

The practical operating session was conducted all day by Dr Dewan who was assisted by the junior surgeons and trainees. Live telecast of the operating session was watched by the delegates in the lecture theatre, who were able (and did) constantly interact with Dr Dewan, inquiring about and entering into debate related to the choice and conduct of the surgery; a debate energized by the presence of expert Urologists and Paediatric Surgeons in the audience. Importantly, the meeting was worth 15 continuous professional development points for those who participated.

Bloemfontein 2nd Paediatric Urology Symposium - Sponsors



Bloemfontein 2nd Paediatric Urology Symposium (cont'd)

In the lecture theatre, in addition to the vision of the surgery, discussion and presentation of other topics was facilitated by Dr. Freddie Claassen, Dr. Izak van Heerden and Professor John Lazarus, to interdigitate with the important parts of the operative procedures, and to provide stimulus to the audience when cases were commencing and concluding. The surgical and radiological manifestations of the following topics were discussed:

1. *Endoscopic treatment of vesicoureteric reflux.*
2. *Long term outcome of Macroplastique in management of primary reflux.*
3. *Vesicoureteric reflux treatment. Open surgery – when to treat and which treatment option.*
4. *When and how to taper the ureter before reimplantation.*
5. *Pelviureteric junction obstruction. Surgical technique –when to do reduction of the renal pelvis.*
6. *Use or not of stents and nephrostomy tubes.*
7. *Ureterneocystostomy: intravesical or extravesical.*
8. *How to do COPUM ablation.*
9. *Approach to unilateral and bilateral hydronephrosis.*
10. *Non palpable testis –first stage Fowler-Stephens procedure (laparoscopic).*
11. *Cryptorchidism – what to do with the nubbin? The role of scrotal exploration and laparoscopy.*

In addition to facilitated discussion, several short presentations were given, which were followed by further discussion:

On Tuesday 9th August 2016, the day started with a breakfast seminar, at 0700, with a state of the art lecture on “Antenatal Hydronephrosis – evaluation and treatment options”, presented by Dr Paddy Dewan. The remainder of the day was based in the lecture theatre and consisted of state of the art lectures, radiology quiz, case presentations and topical discussions:

1. *Ethical Considerations in Surgery– Dr Paddy Dewan*
2. *Diagnostic difficulties in children with coexisting pelviureteric and vesicoureteric junction obstruction – Prof. John Lazarus*
3. *Management of a child presenting with persistent microscopic haematuria. When is a nephrology consult necessary? – Dr. S. Smith*
4. *Voiding cystourethrogram after the surgical treatment of vesicoureteric reflux – Dr. I van Heerden*
5. *Prophylactic antibiotics in the paediatric patient – Dr. A. Adam – Aspen Lecture*
6. *Radiology Quiz: Dr. Padma Rao, Dr. Freddie Claassen*
7. *Case Presentations: Prof. J. Lazarus, Dr. I van Heerden, Dr. A. Adam, Dr. F. Claassen.*
8. *Topical Discussions: A number of presentations by the surgical trainees:*
 - a. *Vesicoureteric reflux.*
 - b. *Pelviureteric junction obstruction.*
 - c. *COPUM (congenital obstructing posterior urethral membrane).*
 - d. *These are outlined in more detail in the programme.*



Dr Freddie Claassen receives a donation of much needed fine surgical instrument, on behalf of his hospital, from Dr Dewan.

Bloemfontein Workshop



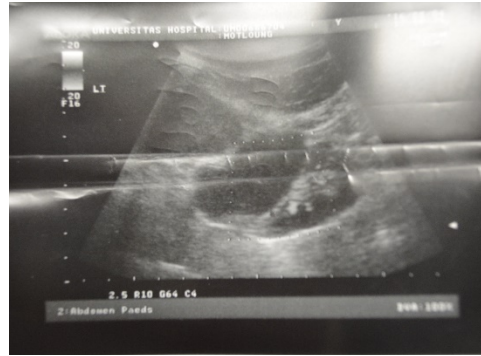
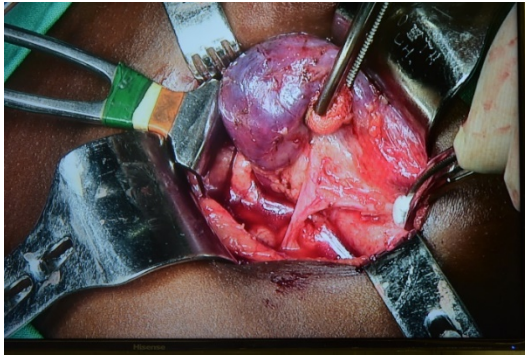
The anaesthetic, ward and theatre nursing staff, and the Unit clinicians were pivotal to the success of the Kind Cuts for Kids visit to the Free State University.

The surgery workshop component of the Bloemfontein visit consisted of three cases during the symposium and a further case the following day. One was a heminephrectomy for a complex duplex, one a nephrectomy for a poorly functioning kidney that was obstructed and found to not be amenable to surgery, the third was a boy whose obstructed kidney was repaired and the fourth a boy with a major anomaly of his penis who had an operation invented by the Kind Cuts for Kids team during a previous trip to Mongolia

Clinic Case 1



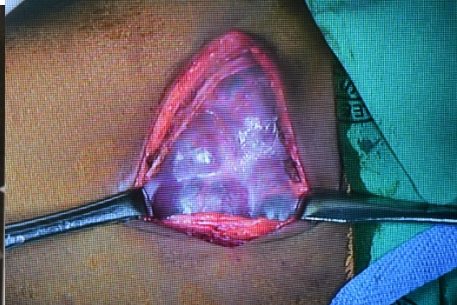
This little girl was found to have a dilated system on an ultrasound after presenting with multiple urine infections. The function study showed no evidence of activity of the upper pole, with no anomaly seen on studied of the bladder, including cystogram, cystoscopy, and ultrasound. The anatomical finding was the rare anomaly consisting of a join of the ureter of the upper pole of the kidney to the lower pole ureter with a stenosis at the junction. Removal of the dysplastic tissue enabled the girl to have an early discharge, having been involved in a very informative operation for the audience.



Clinic Case 2 and 3



Two children had surgery for blockage of the flow of urine from their kidney. The ultrasound of each showed the likely finding; The top left ultrasound of case 2 matched the thin “bag” found at surgery, leading to removal of what was effectively a non-functioning kidney. The difference to the ultrasound (bottom left) is the presence of bands of kidney tissue suggesting the greater degree of function as suggested by the macroscopic appearance and the nuclear medicine study undertaken before surgery.



Cape Town



The view of the front and from the back of the Red Cross Children's Hospital, a hospital that was established 60 years ago.

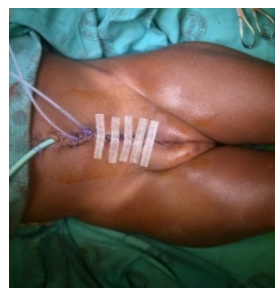
This, the third to the Red Cross Children's Hospital came from Professor John Lazarus's invitation, and involved ward rounds, operating and a webinar on medical ethics. Patients with complex anomalies had been collected from the departments of both the Cape Town University and that of the near-by Stellenbosch University, with the cooperation of the Head of the Urology Unit, Dr Andre Van der Merve. Consultants and registrars from both universities participated, including surgeons from Ghana, Zimbabwe and Mauritius.

An extensive ward-round started sufficiently early to allow surgery to start on time on Thursday 11th August, and included the evaluation of five cases, two of which were operated upon on that day and one the following.

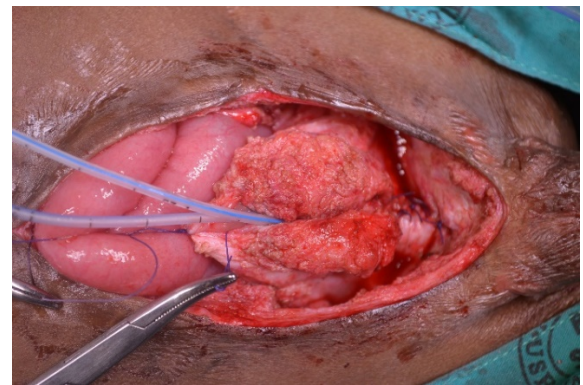
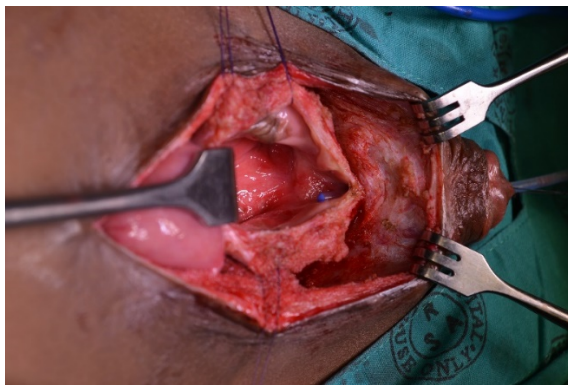
Clinical Work

Case Study 1

A little girl born with her bladder open to the skin continued to have the bladder open to the skin, despite previous major surgery, including operation on the bone of the pelvis. With the assistance of the Red Cross Hospital orthopaedic team and a six hour operation, the bladder was able to be placed within the pelvis, with the before and after photos showing the excellent result, but not the complex steps between that resulted in the marked difference to the appearance and the patient.



Case Study 2



A boy born with bladder exstrophy had undergone a number of procedures, but was still incontinent. It was considered that a combination of bladder enlargement and continence diversion was the only option, however, during discussion of the bladder and upper urethra it became possible for a bladder neck reconstruction to be carried out, giving him more options for the future with potentially less complications.



Nursing staff with Dr Freddie Claassen, Dr Dewan and Dr Padma Rao in Bloemfontein.

Sponsors and Supporters

Lawson Delaney and Johnson Recruitment, our Gold Sponsors; ODC Design, Baumgartner Partners, Edge Commercial Interiors and South Western Drilling, our Silver Sponsors; plus our platinum members were the principal contributors to the financing of the South African project; important and significant further contribution has been made by fundraising activity within the Albanian community in Melbourne, the Manningham and Preston Rotary Clubs in Victoria. Warner & Webster also assisted by providing discounts for surgical equipment taken as part of the mission.

All the nursing staff of theatre and the wards, the anaesthetic teams, the radiologists, paediatricians, nephrologists and the surgical team have contributed well beyond the call of duty, in each of the hospitals visited, not only in the care of the children and a dedication to learning from the clinical interchange, but by the warm welcome and hospitality shown to the visiting team.

LAWSON DELANEY

