Palestine

`

Paediatric Service Training
for
Urology/Surgery, and Radiology

30th July - 11th August 2005

Professor Paddy Dewan, Dr Padma Rao, Dr Ben Yapo

A project of the Union of Health Care Committees, The Australian Islamic Council, Children First Foundation, Beit Jala Palestinian Australian Community, and the Kind Cuts for Kids Foundation

Overview

Many people have contributed to the organization of a Paediatric Surgical and Radiological team to Palestine. The initial contact was between the Al Awda hospital, run by the Union Committee of Health Care Committees in Gaza, and the Children First Foundation. The kind cuts for Kids Foundation responded to a request for a teaching and service visit with the assistance of Mr Phillip Sacca, who was instrumental in ensuring the success of the venture.

Ryad, the Head Nurse for the Al Awda Hosptial, was one of the principle persons due credit for the number of cases seen and the smooth running of the program. His efforts were tireless, and aided by Chief Surgeon and the staff in the theatre, the ward and outpatients.

Al Awda Hospital is a 50 bed not for profit hospital, run by the Union of Health Care Committees, and consists of three wards, an Emergency Department, two theatres; providing care for children and adults, including obstetric patients. The Outpatient Department consists of five consulting rooms, plus an ultrasound room.

During the brief visit, 41 operations were performed on 36 patients, with over 95 patients being evaluated, with some operations having to be deferred to the next visit.

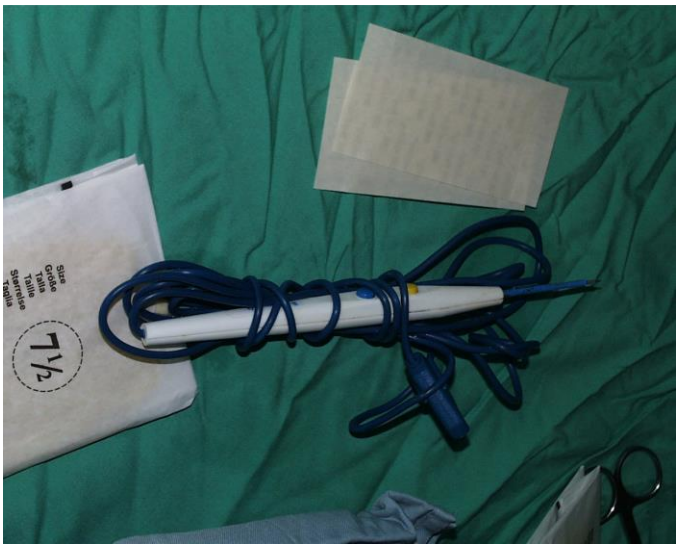
Dr Padma Rao vetted and investigated the cases with Ryad, while Dr Ben Yapo assisted with the surgical and recovery management of the cases while teaching the Palestinian doctors and nurses. A major contribution to the success of the visit was the participation of the local Paediatric Surgical staff, and the opportunity to lecture at the University to a large audience. The enthusiasm of the local medical staff enabled the gains to be much more than the individual cases treated.

Professor Dewan and his team meet with the Board of the Union of Health Care Committeess at the beginning of the Gaza mission.

The front and view from the Al Awda Hospital is shown (top row). One can easily see why Gaza is known as the grey city.

The busy Outpatient Department was being used for Paediatric Surgical patients almost constantly during the visit (middle left).

Dr Ben Yapo assisted with the teaching of the junior medical staff and the nurses in theatre, and he also helped with teaching the nurses and surgeons in theatre. The number of surgeons and the high level of focus can be seen. Redo surgery was a feature of the shared difficult cases, as illustrated in the lower left picture.



Equipment shortages were obvious and some of the equipment used was dangerous.

During surgery, the handle shown in the top left picture is used to conduct current to the patients, which cuts tissue with less bleeding. A number of these were donated from Australian hospitals.

The diathermy pad (middle) - the device that conducts the current back to the generating machine - has been used several times, despite being for once only use.

The machine that was used to generate the current was old and dangerous. The ability to adjust the settings often failed. Serious injury was avoided during the Paediatric Surgical visit, but a boy had virtually lost his penis in the weeks prior to our arrival, due to an accident using the machine.

Purchase of a new machine prior to the upcoming visit would be an important contirbution

Consults

Patients Reviewed

Anorectal anomaly	8
Intersex	1
Bladder exstrophy	2
Burkitt's Lymphoma	1
Renal calculus	4
Chronic constipation	4
Ectopic ureter	1
Cloacal anomaly	1
Cloacal exstrophy	1
COPUM	2
Bilateral duplex kidneys	1
Scrotal fat necrosis	1
Hirschsprung's	3
Hypospadias	35
Pelviureteric junction obstruction	6
Neuropathic bladder	5
Penile anomalies – other	5
Nocturnal enuresis	7
Vesicoureteric reflux	6
Other	8

Surgical Cases

A total of ***79*** **operations** were performed on ***38*** **patients,** the major group being boys with hypospadias, most of whom had previously unsuccessful surgery. The major case included a boy with bladder exstrophy (below – right), who had a six hour operation, redo anorectoplasty children (table), and patients who had other urinary tract surgery.

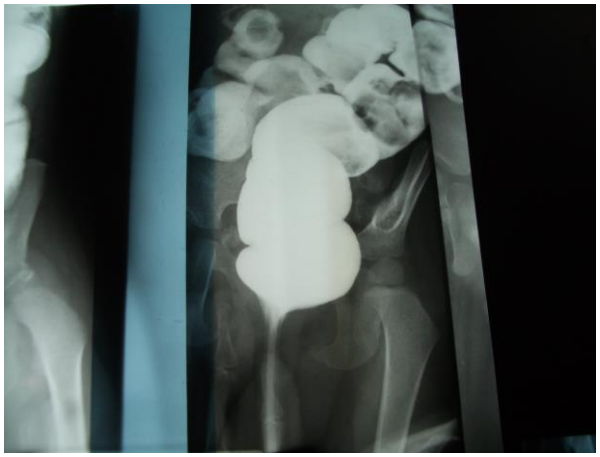
Operations Performed

Adhesiolysis	2
Bladder exstrophy closure	1
Chordee release	2
Circumcision	9
Cystoscopy	6
Rectourethral fistulectomy	1
Hypospadias repair	17
Scrotal Biopsy	1
Nephrolithotomy	2
Omphaloplasty	1
Orchidopexy	1
Osteotomy – anterior	2
Pyeloplasty	5
Pena anorectoplasty	5
Rectosigmoid colectomy	2
Rectal biopsy	1
Swenson	1
Suprapubic/urethral catheter	2
Ureteric stenting	1
Ureteral diverticulectomy	2
Ureter repositioning	1
Ureteric reimplantation	5
Urethral advancement	1

Surgical Cases

Case 1:

This little girl presented with chronic severe constipation for which she had a procedure to remove a congenital megacolon with an excellent outcome, with a life changing effect on her life-style.



Case 2:

Hassan Akram Abdallah had been shot, receiving injuries that included the deformity of his penis shown below. Fortunately a complete repair was possible (right).

Teaching and Future Direction

Paediatric Surgery

A number of new techniques and variations on procedures were taught during the Palestine trip. Some were basic techniques like the kidney split, but also the abdo perineal anorectoplasty, posterior redo anorectoplasty, catheter elevation for catheter, caudal anaesthesia, retrograde pyelography, guide-wire insertion of a Foley catheter, skin graft urethroplasty, diathermy dissection, and catheterless ureteric reimplant. Other techniques shown included:

1. Anterior anal sphincter plication.
2. Posterior anal sphincter plication.
3. Pena anorectoplasty - single stage.
4. Swenson procedure.
5. Skin crease incision for orchidopexy.
6. Hypospadias repair.
7. Lumbotomy nephrectomy.

Nursing staff were given instruction of the care of the patients and how to better manage the post operative care of the children, information that was shared with the surgical team during the bed-side discussions, including analgesia, antiobiotic management, catheter management, charting of urine output and treatment and prevention of bladder spasms.

Other features of the visit included that would be changed in the future included: the use of powdered gloves; diorganisation of the theatre instrument trolleys; poor use of sharps containers; the diathermy machine is dangerous; donations of diathermy handles and diathermy tips were essential; instruments were often sterilized by soaking; instruments were of a poor quality; there was no paediatric cystoscope; sutures were far from adequate. All of these problems were overcome by either donation that had come with the team or by being inventive.

The hospital would also do well to instigate a theatre management committee and recruite a Paediatric Anaesthetist, and to acquire a Paediatric anaesthetic Machine

Radiology

The teaching of Radiology was to the radiographers, surgical and nursing staff, as there were not Radiologists to upskill. The facilities were very limited but, as much of the necessary information was able to be achived using plain xray, contrast and ultrasound, all cases were adequately investigated prior to surgery. It is hoped that subsequent visits will involved Gaza radiologist.

Visiting radiologist in afternoons; works between hospitals. One radiographer present

working shift at any one time. Radiographers work between hospitals.

FACILITIES:

1. US machine with doppler facility and 4 probes.
2. General xray machine. Fluoroscopy broken for several years. Unable to split films or take multiple images per second.

Studies normally done: US, IVP, occasional adult barium enema. Other investigations require transfer to other hospital.

FLUOROSCOPY

Broken; not mended because for the amount of work done was thought not to be worth it and had facility to transfer patient to have study done. No ability to split a large film into 2/3/4 to more efficiently utilise film nor automatic coning which reduces radiation.

No mattress on xray table - very uncomfortable for patients.
No gowns for patients; patients have to undress for certain types of xray to be taken often leaving them exposed.
Initially no sharps box available. Radiographer put sharps directly into general waste bin.

Radiographs do not have label imprinted into the cassette and film. Details (name, date etc) are written on the xray after it has been processed and developed. Some studies were not labelled - increases chance of errors +++. Often no side marker used. Radiographers were generally poor at coning to reduce radiation exposure.

Limited supplies such as number and types of catheters and size of cassette. Emphasised that fluoroscopy machine must be working for future visits as we were unable to do cystograms. Lead aprons were of poor quality and broken and only two available. No thyroid shields available.

ULTRASOUND

One machine is present housed in the OPD, which was a Aloka ProSound SSD-4000 consisting of four probes; abdominal sector 4-6 MHz; small part linear 7 MHz; cardiac; and transvaginal.

Therefore, although the sector probe was good for older children and adults, it is not optimal for small children and babies. No suitable probe for neonates.

Paper printout available.

Gynaecologists and cardiologists do most of their own scanning. Technically adept.

However, universally poor on details such as: entering patient name and ID, date of US, labelling of images (part of body, side etc).

Nurse helps to prepare the patient for the doctor, but used the same undersheet and oversheet is used for all patients - no change in between. Trip was primarily aimed at children. Some adult patients self referred themselves for US, sometimes inappropriately, or they were friends or relatives of staff and wanted me to perform and US for them.

RECOMMENDATIONS

- New equipment:- replace existing xray unit with one with facilities for fluoroscopy and split film facilties. Need to be able to capture multiple images per second for barium swallows and MCU examinations. Ideally a low dose digital system with image store facilites is needed, but the low number of procedures performed probably does not justify its installation.
- Sheets and gowns to cover patients having procedures.
- Mattress for xray table.
- Insist on use of sharps containers.
- System for ingraining patient identification details on the radiograph before processing. Makes it a permanent record and far less likely to incur errors.
- Replace existing lead aprons. Increase the number of lead aprons.
- Acquire thyroid shields
- Educate technicians on use of coning to reduce unnecessary radiation exposure.
- Acquire a number of different sized cassettes. Only two sizes available – big or bigger! Wasteful

The team of doctors and nurses with Professor Dewan, Dr Rao and Dr Yapo