

Bosnian Paediatric Surgery and Urology Teaching Project



Professor Paddy Dewan

31st May - 7th June 2014



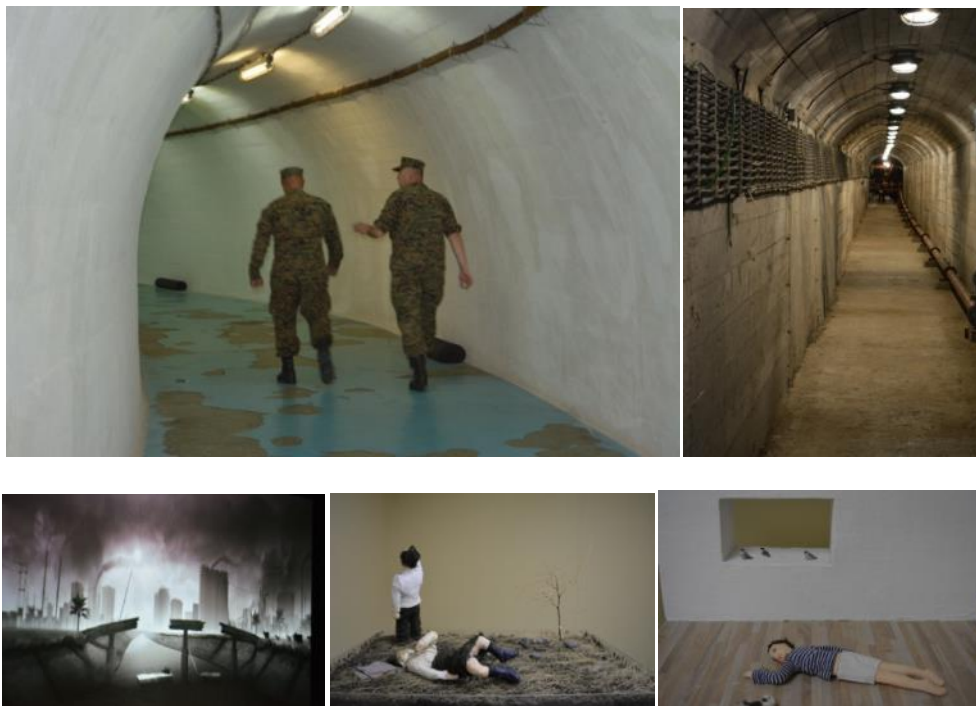
A project of Kind Cuts for Kids,
supported by
The Department of Paediatric Surgery, Klinički Centar Univerziteta, Sarajevo
and
Bosnia and Herzegovina Department of Health

Introduction

The recent visit to Bosnia is the third to that country, and one of four country visits to the Balkans in 2014, each part of the mission designed to provide teaching and service related to the care of children with complex paediatric surgical disease.

In Bosnia and Herzegovina, despite the complex past, and imposing recent history, paediatric surgery is of a high standard, although within the construct of a degree of limitation of facilities and necessary equipment upgrades. Certainly, the local paediatric surgical, anaesthetic and radiology teams are dedicated to continuous quality improvement and a cohesive team approach that is sometime lacking in developing country paediatric surgery.

To recap on the country of Bosnia from previous reports; it is a country that has only very recently been through the experience of war; many scars of which are still evident in the unrepaired buildings, the memorial monuments and the injured people. The photos (below) show the tunnel used by Tito in the 1950's that has now been converted to an art complex, and which reflects the complexity of the history of the region over the last 100 years.



Four Country Summary

Since 2011, 13 country visits to the Balkans have occurred, three of which have been to Bosnia: during the three visits to Bosnia, there have been 77 consultations related to 50 different patients, and 93 operations on 31 patients who have had a total of 52 anaesthetics, including four who have had three anaesthetics. Overall in the Balkans there have been 123 patients who have been operated upon, undergoing 381 procedures that have followed 347 consultations.

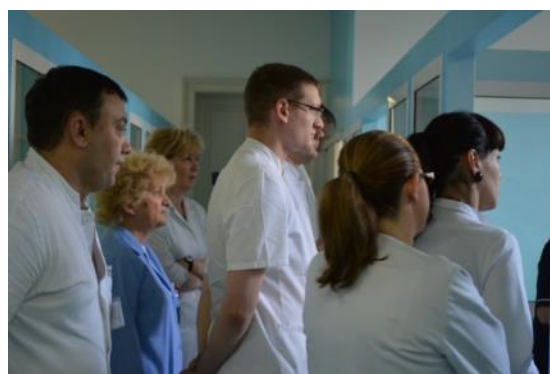
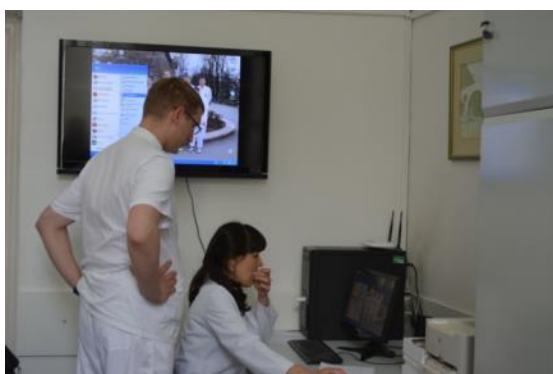
Department of Paediatric Surgery



The Department of Paediatric Surgery consists of senior and junior surgeons, plus senior trainees, who have undertaken the bulk of their training in Bosnia, but who have also participated in several continuing education courses, including those that are conducted on a regular basis in Sarajevo. The Department also teaches university students, including medical students. Also, there are often senior surgical trainees present in the department who are there on various scholarships provided in the Balkans for further education, including, on this occasion, Dr Vukadin Milankov from Novi Sad, Serbia.

Morning meetings are held to discuss the evening cases with the whole department, and to discuss the ongoing management of the complex cases in the ward, including those cases that may have been in intensive care, facilitated by access to a centralised computer database for radiology, and the installation of a screen to enable all to view the images, including operative photos, during discussion. These meetings were used to consider which cases were suitable for the week-long symposium, what patient preparation was necessary, and to consider academic discussion pertaining to the condition being treated.

The meeting was usually followed by a ward round, as shown in the second picture. The first image is of staff sorting through information prior to the commencement of the morning session.

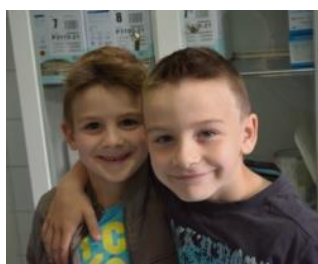


Paediatric Surgery – Bosnia 2014

Consultations

Nine females and 14 males were reviewed, more than previously, and with a lower proportion being operated on than during the last visit. Fourteen were patients previously operated on for significantly major pathology and needing review by the visiting team. Two of these had further surgery for the management of their anorectal anomaly. In all, during the three visits, there have been 77 consultations related to 50 patients.

Gender	DOB	Date	Diagnosis
Male	10/08/2006	1/06/2014	Anorectal anomaly
Male	15/03/2008	"	Teratoma sacral as baby – megarectum
Male	11/09/2013	"	Multiple anomalies + anorectal
Male	25/02/2009	"	Hirschsprung's
Female	6/02/2014	"	Sacroccygeal teratoma
Male	25/06/2013	"	PUJ obstruction - lower pole vessel
Female	11/02/2012	"	Anorectal anomaly - poor control
Male	12/10/2012	"	COPUM
Female	21/06/2008	"	Hernia - Ventral - post Gastroschisis
Male	14/04/2014	"	Anorectal anomaly + VATER
Female	28/06/2013	"	Anorectal anomaly - Huge rectum
Female	12/06/2007	"	Anorectal anomaly - resected rectum anteriorly
Female	30/01/2013	2/06/2014	Bladder Exstrophy – dehiscence
Female	1/02/2003	"	Anorectal anomaly
Male	28/04/2011	"	PUJ L VUJ R
Male	28/09/2001	"	Anorectal anomaly
Male	20/05/2010	4/06/2014	Hypospadias
Male	21/06/2013	5/06/2014	Hydroureteronephrosis – bilateral
Male	13/06/2013	"	Hydroureteronephrosis – bilateral
Female	3/12/2007	"	Epispadias – incontinent
Male	14/04/2012	6/06/2014	anal atresia with perineal fistula
Female	16/02/2012	"	anal atresia, anovestibular fistula
Male	20/08/2009	"	Hepatic Cyst; Hydatid 6cm cyst



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Operative Procedures

Nine patients were operated on, with a total of 25 procedures, all with either the assistance of, or being conducted by a senior member of the Sarajevo team. These procedures usually had a number of observers, and time was taken to ensure that sufficient photographic documentation occurred to enable repeat reference to the images to enhance the educational value of the visit.

DOB	Date	Operation	Pathology
25/02/2009	2/06/2014	EUA – anus	Hirschsprung's
"	"	Colostomy closure	"
6/02/2014	2/06/2014	Excision of excess skin	SCT
"	"	Sacrococcygeal Teratoma	"
21/06/2008	2/06/2014	Abdominoplasty	Hernia , ventral – Gastroschisis
"	"	Ladd's procedure	"
"	"	Wound revision	"
"	"	Appendicectomy	"
12/06/2007	3/06/2014	Laparotomy	Anorectal anomaly
"	"	Pena – AEA	"
"	"	Rectal resection plication	"
11/09/2013	3/06/2014	Cystoscopy	Urethral stricture
"	"	Guide-wire insertion of IDC	"
"	"	Laparotomy	Anorectal anomaly
"	"	Pena – high	"
28/06/2013	4/06/2014	Laparotomy	Anorectal anomaly – Megarectum
"	"	Pena – abdominoperineal	"
"	"	Rectosigmoidectomy	"
1/02/2003	4/06/2014	Laparotomy	Anorectal anomaly – Megarectum
"	"	Pena	"
"	"	Rectal imbrication via abdo	"
"	"	Rectal resection – plication	"
25/06/2013	5/06/2014	DJ stent removal	PUJ obstruction
"	"	Pyeloplasty	"
14/04/2014	5/06/2014	Pena	Anorectal anomaly + VATER



Theatre Staff

The following were an assistant during at least one operation - Dr Emir Milisic, Dr Nadzida Dziho, Dr Nusret Popovic, Dr Asmir Januzi, Kenan Karavdic, Dr Alena Firdus, Dr Zlatan Zvizdic and the head of the unit Prof Adnan Hadzimuratovic; the anaesthetic staff included Dr Selma Vatrencak, Dr Amira Mesic, Dr Aida Corbeg, Dr Elvir Mehovic, including technicians Enes Cizmic and Tarik Zametica, while theatre nurse support was provided for the long operative sessions by Amra Zubovic, Jasna Preljevic, Armina Selmanovic and the excellent technician support provided by Mr Azam Catic; some of the staff are pictured below.



Equipment

The equipment in the theatre complex is more than adequate for high quality surgery, but as for most centres in the world, upgrades of basic equipment would be appropriate, which will be provided when a new theatre is commissioned for paediatric surgery. The other specialities in the hospital have recently moved to their alternative, new theatre, making at least access to theatre time more flexible. The most notable upgrade was the availability of the Ligasure (image 1) equipment for bowel cases, and the previously donated ring retractor was in constant use. As shown, the heating of the room for when babies were operated on was basic, but effective. It is hoped that a new cystoscope set can be purchased using the combined resources of the Australian Embassy, Rotary International and Kind Cuts for Kids.



Radiology

An ongoing issue has been the lack of images provided after ultrasounds are performed, which is being addressed, particularly assisted with the development of combined meetings with radiology. The quality of radiology studies is evidenced in the case reports.

Clinical Cases

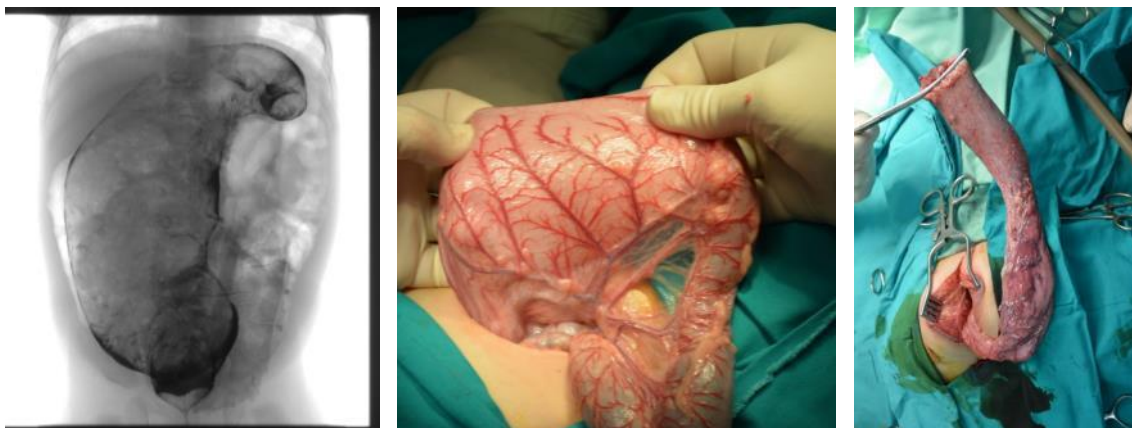
Case 1

Albina was born with an anorectal anomaly for which she had previous surgery, including attempts to improve her outcome for continence with a less invasive approach than was used during this visit, with ongoing constipation and incontinence, despite maximal laxative treatment and previous revision surgery. A barium study showed a large rectum, which was confirmed at surgery, during which she had the upper part of the bowel decreased in size by infolding, and the pelvic component reduced in sized with the incision as shown.



Case 2

Nadin, a 12 month old girl presented with an anterior ectopic anus that was noted at birth, with bowel function that was able to be controlled by laxatives and washouts, despite the huge rectum seen in both the barium study and the intraoperative photos. A single stage abdomino-perineal procedure enabled removal of the megarectum and establishment of normal function.



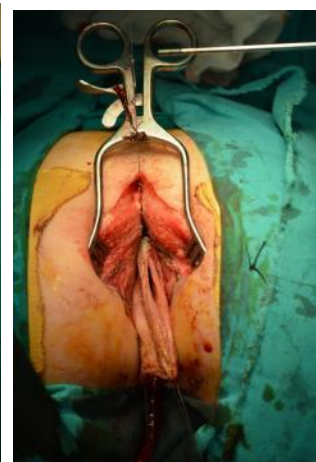
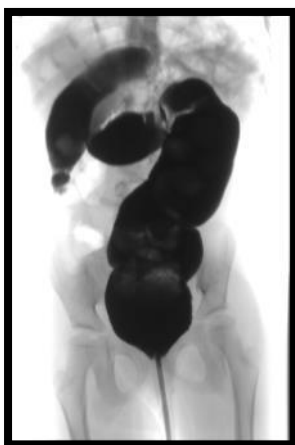
Case 3

Samir, a 12 year old had been inadequately assessed as needing faecal diversion which was planned by a visiting international team visiting Serbia; the operation to occur in USA. Instead, in Bosnia last year, a procedure by Kind Cuts for Kids improved the arrangement of the pelvic muscle and perineal skin which has improved his bowel function to virtually normal. The image is a poster used for the public campaign to raise funds for the expensive out-of-Bosnia option.



Case 4

A complex situation of a megarectum (X-ray) that had been treated with a divided colostomy (top right), was able to be dealt with by imbrication of the upper rectum and plication of the lower rectum, which was the infolding of the intra-abdominal lower colon and the excision of the posterior part of the pelvic colon. The pelvic colon is shown in the third image after the excess bowel has been removed.



Sponsors and supporters

Lawson Delaney, our gold sponsor, ODC Design and Baumgartner Partners, our silvers sponsors, plus our platinum members are the principle contributors to the financing of the Bosnian project. Important and significant further contributions have been made by fundraising activities within the Albanian community in Melbourne, the Manningham and Preston Rotary Clubs in Victoria, with additional contribution from Europe, including Austrian Airlines, the Mastilo family; Bosnalijek who hosted a dinner for the theatre staff, the Belvedere hotel in Sarajevo. Warner Webster also assisted by providing discounts for surgical equipment taken as part of the mission. Radio Sarajevo has also been of great support through a story published on the internet that can be viewed via the link - <http://www.radiosarajevo.ba/novost/154041/>.

The initiation of the Balkans project should be recognised, including John Taip, Reg Karafili and Sezar Jakupi from the Australian Albanian community and Gary Zecevic an Australian/Montenegrin whose donations have significantly added to the scope of the project. And, while all those associated with the project in both Australia and Bosnia have made their own contribution, the ongoing commitment of Kenan Karavdić deserves special mention.



Our greatest supporters are the families that put their trust in the work we do.