

# Developing Urology in Developing Countries

It is almost two decades since Urolink was set up as an organisation under the auspices of the British Association of Urological Surgeons (BAUS). Its original mission statement “to promote and encourage the provision of appropriate urological expertise and education worldwide with particular emphasis on the materially disadvantaged” has been propagated by many urologists over this time. The sustainability of these links has depended on the commitment of both the early Urolink supporters and the local teams delivering care in challenging conditions. To echo the words of one of Urolink’s founders, Neville Harrison, we as surgeons “enjoy many unique privileges...with a long tradition of international co-operation”, and sharing these privileges can be mutually rewarding.<sup>1</sup> The economic gap between the developed and developing world continues to widen, and so with our privileges we may be able to contribute at least in a small way to the self-sufficiency of those less fortunate.

## History of Urolink

This year marks a quarter of a century since an original proposal to form the Tropical Urology Society in 1983. A link with the Association of Surgeons in East Africa was discussed by BAUS in 1985, and during the next few years BAUS members ratified the formation of Urolink, which became a sub-committee of BAUS in 1996 (and was absorbed into the restructured BAUS in 1999). Under the chairmanship of Neville Harrison, Chris Chapple, Steve Payne, David Gillatt, and now Ru MacDonagh, the organisation has achieved a number of important goals. These include providing sustainable links with centres, introducing a fellowship urology exam in Africa, securing support for free access to medical journals for a number of centres abroad, and sponsoring trainees and consultants to visit the developing world centres.

## Transporting expertise

The recent generous award of £75,000 over three years to Urolink from the *BJU International* will, among other things, facilitate workshops, through which interested BAUS members can contribute. The application process for the estimated two workshops per year will be available on the website ([www.urolink.org](http://www.urolink.org)). These workshops may help to formalise what has already been delivered by the early ‘Urolinkers’ in centres such as the Kilimanjaro Christian Medical Centre (Moshi, Tanzania) or the Mnazi Moja Hospital (Zanzibar, Tanzania). The teams of two to four consultant surgeons from the UK, accompanied by a UK trainee, will visit an established link centre, using their urological expertise to train the local team in managing a range of cases and focusing on mutually agreed specific topics. Feedback from the surgeons attending these workshops will determine which programmes attract future support. Those interested in running these workshops will include both current and retired consultants, as Urolink is keen to tap the wealth of urological talent that we are lucky to have on these shores.

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Recognition of such commitment was marked by the award of the prestigious St Peter’s Medal to Christine Evans at last year’s BAUS Annual Meeting; the colourful tales from her travels abroad matched the tail of Basil Brush, her co-finalist in the *Weakest Link*, for those who somehow missed it! Another worthy accolade was for Dr Lester Eshleman, who was awarded the St Paul’s Medal by BAUS in 1999, and whose achievements were highlighted by Neville Harrison.<sup>1</sup> However, as most involved with Urolink would testify, for each recipient of such an award, there are innumerable persons abroad whose dedication keeps these medical centres viable. If you feel you have the time and motivation to help in any capacity, do not hesitate to get in touch (contact details at end of article).

## Equipment and supplies

Despite oft heard gripes about the tools we are handed when operating, this pales into insignificance if one considers what surgeons in developing countries depend upon. With the high costs of endoscopic equipment, it is no surprise that even old camera stacks are sought after, along with the cystoscopes and resectoscopes that we may take for granted. If you are involved with the purchasing of a new system, then spare a thought for the old equipment, which may find a loving home in a developing centre rather than gathering dust in a corridor or cupboard here! Similarly, new rules for ‘infection control’ can result in disposable devices replacing otherwise perfectly working equipment. If this equipment is to remain unused, then Urolink may be able to put it to good use. We remain grateful to industry for their donations.

## Training opportunities

During what has been a particularly uncertain time for British trainees, with several changes in training being debated, a trip to a centre in the developing world can seem difficult to fit in to a training programme. However, many have been inspired by the time they have spent on Urolink trips, during what can effectively be a ‘Masterclass in Surgery’, with volumes of open surgery and advanced pathology not commonly encountered during training here. Experiences of surgery in the tropics regularly appear in local publications, whether urological or more general.<sup>2,3</sup> Adjectives to describe these experiences have ranged from humbling, eye-opening, to even unexpectedly refreshing. The prime aim of the workshops described remains commitment to training the local team(s), but opportunities abound for motivated UK trainees to get involved. Previous trainees on Urolink visits have often commented on feeling inspired by both the visiting trainers and the local team, in the face of sometimes quite difficult circumstances. There is an annual award of £1,000 granted by the Senior Urological Registrars Group (SURG) and Urolink for a trainee or junior consultant to attend a Urolink visit; details of applications are also available through the website and Christine



**Ranan DasGupta**, Specialist Registrar on the London Deanery rotation. He is on the Urolink Committee and is keen to continue fostering links and developing ties with new centres. At a time when urological training is being overhauled Ranan is looking forward to an increasing involvement in UROLINK with other interested trainees.

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## Acknowledgement

The full version of Miss Evans’ diary first appeared on the urolink website ([www.urolink.org](http://www.urolink.org)). We are delighted to reproduce part of her diary here by kind permission of BAUS.

Evans spoke with great enthusiasm about her Urolink experiences at this year's SURG meeting in September. The experience gained extends beyond simply medical, as the cultural and economic differences can be stark.

### Education abroad

One of the key aims of Urolink has been to develop the local academic infrastructure to support the clinical services offered by Urolink. For example, at Kilimanjaro Christian Medical Centre (Tanzania) an Institute of Urology has been established, with development of a clinical database with major contributions from Katherine Kennedy, Ru MacDonagh, John McGrath and Phil Thomas. The introduction of an African fellowship in Urology also promises to provide a quality mark for locally trained surgeons, and will hopefully generate interest among trainees in these countries to achieve a recognised qualification without need to travel abroad. Another centre that has seen a number of visitors from the UK is the Fistula hospital in Addis Ababa, Ethiopia, where fittingly Gordon Williams has been inaugurated as the Dean of the new medical school. A key principle in this and other centres is the training of nurses and ancillary staff on whose support the local surgeons will depend. It is proposed that a selected number of foreign trainees will be awarded a *BJU International* scholarship enabling them to undertake specific urological training for a period of one year, delivered in a developing world centre.

The article by MacDonagh et al.<sup>4</sup> addresses how mutual collaboration or 'twinning' between centres is more sustainable than simply providing 'aid'; it describes the basis of a link, including its establishment, funding and maintenance. The lead authors draw on their own experience from the preceding eight years to describe the key features that underpin enduring links, and to advise how to avoid potential problems.

The support of the *BJU International* has been widely appreciated, including making the journal available to places where there is a distinct lack of access to medical literature. Although the main urological issues are often quite different, exposure to current literature is surely a basic necessity for those running these hospitals. Free web access to journals has also been secured for many developing countries, a much needed resource.

### Website

The website [www.urolink.org](http://www.urolink.org) was developed by Steve Payne, and is now maintained by a professional web management team. It remains the key source for information on previous and future urolink visits, containing the application forms for the workshops, travel awards, and general contact details. With links to other larger charity organisations, this site is very user friendly, and you are encouraged to browse at leisure.

### Conclusion

There has always been interest in contributing to Urolink among BAUS members, and the organisation is keen to involve as many of this wide faculty as possible. If you feel you have some time to spare in your hectic schedule for the benefit of truly grateful patients, then do make contact, and establish a link.

### References

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- MacDonagh R, Jiddawi M, Parry V. Twinning: the future for sustainable collaboration. *BJU* 2002;**89**(Suppl 1):13-17.

### Further information

If you are interested in becoming involved with Urolink or simply want to find out more contact:

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## 2007 Urolink Trip to Zambia, Zimbabwe and Kenya

*By Christine Evans, Retired Urological Surgeon from Rhyl, North Wales, and a former chair of Urolink.*

### 3rd November

I travelled from Heathrow to Zambia via Nairobi with Tim Stephenson, recently retired urologist, via Kenya airlines. We were met by Mohammed Labib and immediately had a wonderful lunch at the Labib's house which included two of the team from the Irish College of Surgeons who had come to teach the trainee surgeons basic surgical sciences. As usual Mona Labib's cooking was to die for.

### 5th November

We did a ward round in the University Teaching Hospital (UTH). There were numerous cases on the ward brought in for operations over the next few days including a 23-year-old girl who had developed vaginal atresia after pelvic fracture some years prior and a 10-year-old boy with urethral obstruction also following a pelvic fracture.

We also did a ward round and were sad to see how little expertise was given to the day to day management of the patients i.e. no notice was taken of renal failure, fluid input and urine output. Several cases were brought in for Tim to do with his urethroplasty experience and also a man with a badly defined space occupying lesion of his left kidney. We persuaded the senior administrative surgical staff to arrange a free computed tomography (CT) scan, as the cost is normally \$250 which the patient was unable to afford.

### 6th November

The vaginal atresia girl was difficult to examine so we arranged to do her surgery next week in Monze with the excellent gynaecologist Michael Breen. The boy became a mystery; despite trying to do a urethrogram under general anaesthesia, he seemed to have lost his penis somewhere. His surgery is scheduled for later in the week. The other cases were a straightforward optical urethrotomy and a urethroplasty.

### 7th November

The list was mainly endoscopy with a bladder stone on a Lippes loop, which had eroded into the bladder, and a bladder calculus which I decided was not a bladder tumour. I resected the base for histology (came back inflammatory later). If you pay, it costs \$250 and you get the result in a few days, if you don't you wait six weeks for the pathology - iniquitous system.

The endoscopic equipment was all there including the video stack, but was difficult to piece together, so Tim was happy to let me struggle! We had a stroppey theatre nurse who left us when I told him off, to be replaced by a wonderful young man. That evening there was a lovely dinner with the Irish and the main members of the senior surgical team at UTH in a posh restaurant which was not cheap. The cost of living has shot up in Lusaka.

### 8th November

Tim was left to his own devices doing urethral strictures in theatre. He decided against a buccal mucosal graft in favour of a urethrotomy for one patient, due to the lack of water for hand scrubbing and general lack of hygiene. The water is off most of the time on the wards and theatre.

I examined the final year medical students, who were good. It was an Objective Structured Clinical Examination so I did intercostal drainage 17 times in three hours. Knew it off pat by the end!

### 9th November

Tim did the radical nephrectomy with me assisting; it went well. Then the boy with the missing penis, which in fact was found



*Boy with pelvic fracture and missing penis.*



*Buried penis found.*



*Left renal tumour.*

buried behind the lower abdominal skin in the gap of the diastased pubic bones, it had bent itself forward. It looked a bit skinless when found, so prepuce was used to cover the shaft and hey presto it looked good, much to the delight of mum and child, and there was no stricture. Apparently it healed very well. The rest of the list was a struggle. I paid the theatre staff \$50 to finish the last two hours!

#### **12th November**

I get the early bus to Monze where we had a full week's operating to do. I arrive at 9am and it's lovely to see Michael Breen again. Theatres and patients are all ready for us. First case was the vaginal atresia. It went like a dream with the skill of Michael. We did two vesicovaginal fistula (VVF), one by me and one by Michael which was also a recto vaginal fistula.

#### **13th November**

This is Tim's urethral stricture day; two have arrived from Lusaka and this time he did manage the buccal graft as, although there's still no running water, the standard of theatre hygiene is much better. I did a big clinic and saw patients normally seen by the urologist who visits from Lusaka every two months. I had the wonderful task of wading through loads of chaps with catheters in. I have booked two for prostatectomy later in the week, there are a couple of bladder tumours and a hydronephrotic kidney on ultrasound, IVU booked.

#### **14th November**

Tim's having a VVF teaching day from Michael, whilst I plod on with the other cases in the second theatre. No luxury of diathermy there, so I do a ruptured ectopic (first in 40 years and really enjoyed it) and an orchidectomy. Then the IVU of the obstructed ureter appears and hey presto there's a huge stone in the upper ureter. So I get to teach Michael something, i.e. how to find, open and remove a stone from the upper ureter.

#### **15th November**

Tim leaves for Livingstone and sight seeing at Victoria Falls, and Michael and I carry on operating, first a rectal fascial sling for a post VVF stress incontinence. Michael then brings into theatre, in a hurry, a lady exsanguinating from post partum haemorrhage. She has just given birth to twins and her exhausted uterus has failed to contract. He has put a huge balloon in the uterus but failed to stop the bleeding. So, with amazing skill, the anaesthetic clinical officer has her anaesthetised in a trice and we have the uterus out and she is saved, to look after her new and alive twins. I suspect in many cases she would have died as the anaesthetic would have been too slow or refused. So, we go back to normal speed and open a woman for a bladder tumour to find it is a huge bladder stone (so much for ultrasounds). Lastly there is an open prostatectomy with Dr Banda the surgical officer. What an operating day – knackered! There is a boy about with a dog bite on his penis – I must find him tomorrow.

#### **16th November**

This is the last day operating. Michael is doing a Wertheims and is glad of me there to protect the ureter, which he has well under view anyhow so I was not really needed! Then an open prostate, and then the dog bite boy turns up with this tiny hole on the underside of his penis half way down, which he is peeing through. I can't get a catheter in so I open the small wound to find the urethra has been completely avulsed from the glans. I stitch it back up. How the dog did this without biting off the whole penis I have no idea. I left the prepuce there in case of further need, if the urethra does not heal. Hope he does not get rabies, I did not hear that the dog was mad.



Boy with dog bite: postoperative after urethra reattached.

Finally, arriving that morning there is a male nurse with hydronephrosis on IVU, looks like a congenital pelvi-uteretic junction (PUJ) obstruction so again I can show Michael something he has not seen before – a dismembered pyeloplasty.

Another massive day's operating which I enjoyed thoroughly. The girl with the brand new vagina has gone home happy with a dilator. All the others are well including the mother of twins. This is an amazing hospital with the most incredible hard working staff.

#### 17th November

I get a bus to Livingstone then a taxi to the border. I am met by a lad who taxis me through the other border and gives me a train ticket before depositing me in the Victoria Falls Hotel, which is one of the best hotels in the world. The internet works, there is the best cup of tea in years served by velvet voiced waiters and you can look over the bridge and the Falls.

At 6.30pm a complete change as I get to the station and get into my first class compartment couchette in a train, which says Rhodesia Railways, so is at least 18 years old. It looks and smells like it! I share a cabin with three other women and the journey takes 13 hours. I am met by Hassan Ashmawy on Sunday morning and immediately get a good idea of how bad things are, most things are bought on the black market system and many things are acquired by the barter system. Petrol isn't quite such a problem as my last visit but there is no bread, milk or sugar in the shops.

#### 19th November

Initially, there's a clinic – a nasty infected paraphimosis amongst other things – then a ward round. There are very few patients about; five doctors and eight nurses on a ward round for six patients – farcical. The doctors seem uninterested and the whole place lacks the enthusiasm which was there a year ago. I think everyone feels there is a hopeless mess in the public sector. It's not nearly so bad in the private sector and money passes hands as the best way to pay is immediately. With the exchange rate as it is, the value of the amount paid to the surgeon, etc. would be halved if the patient waited a week to pay.

#### 20th November

Hassan does an anastomotic bulbar urethroplasty. The theatre is sweltering so it is a choice between the sucker and the fan which the anaesthetist found. The fan won. I give a lecture to the GPs, which is on scrotal swellings and haematuria; it is well attended.

#### 21st November

Another clinic in the morning and then a lecture to the Mpilo doctors at lunchtime and then the trainees at United Bulawayo Hospitals, by invitation of Dr Enweren, the other urologist in town.

#### 22nd November

Hassan has a list in the Mater Dei hospital. This is one bright spot; it is extremely well run, short of equipment yes, but Sister

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Jamieson makes the place work, it is spotless and the staff are motivated.

He does a transurethral resection of the prostate (TURP) and inserts a JJ stent for a young white man with an obstructed upper ureter. This is done with x-ray screening which is the first time he has done it this way, so he is pleased to learn. There is extracorporeal shock wave lithotripsy (ESWL) in Harare in the private sector. So this saved the man an open operation or a trip to South Africa.

#### 23rd November

The bins are emptied once a week and the traffic lights work so there is a great deal to make you think not much is wrong, but then the lights go out, there is no bread, milk or sugar in the shops and you realise that most of the people here are in dire straits.

I went to the National Institute of Science and Technology this morning to meet the Chief Executive Officer of the medical school, an efficient woman committed to having a medical school in Bulawayo, despite few numbers of students and fewer lecturers. She relies heavily on clinical staff at the hospital to do the basic science lectures.

#### 24th November

I go by bus from Bulawayo to Harare. Five hours, with no air conditioning and the windows would not open so I am liquid on arrival. It's interesting countryside with an amazing number of tractors – how long they will work for remains to be seen. We see no livestock until near Harare, when there were cattle, not a sheep or a goat to be seen or a crop of any kind.

#### 26th-28th November

There's not much happening in the Teaching Hospital as the trainees are getting ready to go to Mombasa for the College of Surgeons of East, Central & Southern Africa (COSECSA) exams or are in Tanzania for the biennial urology workshop run in conjunction with Urolink, but I do give two lectures, have a great time with the Samkange family, drink whisky brought from Bulawayo, get my clothes washed and sit in darkness as there are no electrics for 24 hours! I gave the house girl \$10 for doing my washing and her delight was ecstatic.

#### 29th-1st December

I arrived a day early to organise the patients for the COSECSA Membership and Fellowship exams. The exams are being held in The Coastal Hospital which Prof Jani from Nairobi has been visiting over the last few months so, when we arrived on the Friday, there was an army of cleaners and new curtains. Although still shabby it is now very clean. There are excellent patients for the clinical bays including a man with lower limb compartment syndrome, resolving. The exams went well; some bad candidates did not make it, some of the examiners' time expired and they didn't examine on enough topics but I think there is a general improvement since the first exams in 2003.

Finally, I attend the Association of Surgeons of East Africa (ASEA) meeting, as usual a mix of quality of papers. There was a good reception and meal given by Ethicon (Johnson and Johnson); Dennis Robson, George and Milly Borthwick, and Lindsey Stewart were there and as usual were very generous. Dennis is as keen as I am to raise the COSECSA profile within the Edinburgh College. The Irish College were there in force and will soon take over the role which Edinburgh once had.

So, the visit was an excellent five weeks. Thanks to Tim Stephenson, the Labibs, Michael Breen, the Ashmawys and the Samkanges for their hard work and excellent hospitality; Prof Jani Nairobi and Dr Kaale and surgical staff from Mombasa for help with the examinations; Darren Speed from DHL for freight to Zambia; Jean Buckley from Colwyn Bay for fundraising; and Urolink for £500 towards costs.

*At the time of printing Miss Evans was once again travelling in Africa on her final Urolink trip. The organisation is indebted to her for her tireless work over the years.*