

Intensive Interactive Training Programme (IITP)

Focus: Transurethral resection of the prostate and bladder tumour

Date: 9 – 13 May 2016

Location: Institute of Urology, Kilimanjaro Christian Medical Centre (KCMC)

Course organisers: Dr Frank Bright, Head of department of Urology
Dr Jacques Bogdanowicz (visiting urologist approx. 6 months/year)

Lecturer and supervisor: Assoc Professor Magnus Grabe

Objectives

1. Strengthen the capacity of the residents and staff of the institute of Urology to perform transurethral resections (TUR) of the prostate and bladder tumours
2. Hands-on training with new TUR equipment donated by Olympus Europe
3. Offer the opportunity to the residents to prepare and give presentations in topics relevant to the course programme
4. Create a friendly interactive forum for discussion between residents in training and supervisors (senior urologists, expatriate supervisors/teachers)
5. Initiate discussions on clinical research priorities and training

Participants

A dozen residents from East African countries (Tanzania, Uganda, Malawi, Kenya, Rwanda) in training at the institute of urology, KCMC.

General schedule:

The timing varied depending on surgical progress in the two allocated Operation rooms (OR)

Time/Date	Monday 9 to Thursday 12	Friday 13
08:00-09:40	Case presentation by residents Lectures by residents	Remaining lectures
09:40-10:00	Coffee/tea break	
10:00-12:00	Surgery in OR 1 and OR 2 (2 cases)	Summing up
12:00-13:00	Lunch	
13:00-15:00	Surgery in OR 1 and OR 2 (2 cases)	
15:00-15:30	Coffee/tea break	
15:30-16:30	Discussion about the operations of the day Presentation of next day cases by residents	

Lectures by residents:

Two lectures were presented every morning by the residents with interactive discussion and comments by senior staff members and supervisors. (topics: see appendix 1)

Presentations of the patients to be operated upon in the two OR

- OR 1 with the new Olympus equipment (mono- and bipolar techniques)
- OR 2 with older Storz equipment (monopolar)

Surgical programme (individual hands-on supervised training)

Operation room/theatre	Monday	Tuesday	Wednesday	Thursday	Responsible supervisor/coach
OR 1	TURP TURP	TURP TURP	TURP TURB (cTa/T1)	TURP TURB (cT3)	M Grabe
OR 2	TURP TURP	TURP TURP	TURP TURP	TURP TURP	J Bogdanowicz
Overall					F Bright

Comments on endo-urological equipment for diagnosis and TUR:

OR 1: New high quality Olympus and very appropriate

Additional advantage of Narrow Banding Imaging Technology for diagnosis of bladder cancer

Weakness: camera conductive wire at level junction camera head and cable.

OR 2: Old Storz equipment is of borderline quality and requires upgrading

Intensive interactive training programme (IITP)

A week long supervised and focused course

Combines several essential elements of modern training:

- Training in presentation of the theoretical management and surgical approaches of patients, including pre-operative assessment and post-operative care and out-come, directly related to the theme of the session
- Access to EAU guidelines as basic teaching material (needs to be made available on-line!)
- Presentation of each patient/surgical case by the responsible resident with discussion on indication, risk factors, potential side events/effects, expected out-come
- Live “hands-on” surgery with real-time step-by-step supervision and coaching
- Post-operative review of the different moments of the surgical procedure by resident in charge
- Friendly and calm, focused atmosphere
- Focus on patient safety
- A couple of get-together/dinner for strengthening the relationships in a kindly atmosphere

Handover of documents

All presentations and a series of instructive documents and guidelines have been distributed to all participants in PDF files.

Assessment of the IITP session by the participants/residents:

Eight written answers were available (8 residents could complete the whole week – one was ill and one abroad)

Usefulness of the training programme

All eight: Very useful (6/8) or useful (2/8)

General assessment:

What is your general opinion of the IITP (Intensive Interactive Training Programme)?

1. *Very good and informative academically*
2. *A very good innovation, it allowed better/greater student/supervisor interaction. Endoscopy would be a key area for this. Can we organize for future in-service training for practicing urologists to learn things they had no opportunity to do. eg Urodynamics, Dialysis. Ie: start CPD for urologists*
3. *It was useful to me; I recommend to be conducted every semester.*
4. *It is an excellent programme. If resources are available, we need this time and time again. A "BIG THANK YOU" to the organisers. My knowledge and skills will never be the same since this workshop.*
5. *It is good when you have experienced surgeons sharing experience with local and International residents in hands on teaching/training*
6. *Excellent. More pro-active approach to training and mentoring*
7. *It should be repeated because it helps us to acquire skills and experience from seniors*
8. *It is an opportunity never before experienced in the department. High teaching and expert value. I wish it could be an activity sustainable for the department.*

Timing

1. Four days/one week little short – more time needed for direct supervision during surgery (resident and supervisor with focus on the operation)
2. Improve the respect of the time schedule (punctuality)
3. Start visit/round in wards at 07.00 and training course at 08:00 (more time in the morning)
4. Give more time for discussion following presentations and surgical procedures

Presentations:

6/7 valued the time allocated for presentation as relevant; 1/7 expressed need for more time.

Comment (MG/JB): The general view of the residents was that this course was a great step forward but could be further improved by more time allocated for discussion (reduce time for presentation and increase discussion time)

All eight valued the content as relevant

There was a general request for video projections of operation techniques followed by discussion with the supervisors/programme organisers

OR practice TUR-P and TUR-BT

Four of eight (4/8) expressed need for more time while 4/8 found the given time sufficient.

IITP on TUR at KCMC May 2016 (MG/JB)

All expressed satisfaction about the hands-on training instructions.

Focus attention on the surgical procedure and patient safety – ensure calm environment and safe anaesthesia.

Comment (MG/JB): the difference in opinion is probably an expression of the participants' different level of experience.

Suggestions for improvement:

More time for surgical training

Video demonstrations with follow-up discussion

Theoretical model for TUR practice (simulation)

More cases of TUR-BT (see below comment on bladder cancer*)

Strict focus on surgical procedure resident-supervisor

Consistency in the instruction given by the supervisors

Repeat the IITP at least twice per annum for sustainable training

Other possible topics for similar training programme:

Repeated TUR-P and TUR-BT

Hypospadias

Urethral strictures

Urodynamics

Management of Upper UT obstruction

Upper UT endoscopy, stones disease and management

Principles of clinical research and investigations/trials

Assessment of the IITP session KCMC May 2016 by the supervisors:

A most efficient direct hands-on, real time, interactive course with individually supervised and coached, resident training in TUR. Time allocation should perhaps be increased for the younger, less experienced residents.

This was accompanied by active oral presentations by the participants (all level of experience), which of itself is an important aspect of empowerment. The presentations were in general very clear and relevant, combining different reference sources (e.g. EAU and other guidelines, extracts from textbooks such as "the Campbell" and review articles). The junior residents usually presented on the anatomical and physiological aspects, while the seniors covered the management and treatment aspects.

The participants' anonymous appraisal consistently underlines the need for such Intensive Interactive Training in the same topic as well as other subjects. The friendly, calm and focused atmosphere was definitely regarded as a PLUS:

"Basically we need more training like this in open surgery and endoscopy" (#5)

"It should be implemented in the department. It is highly effective, the teaching and sharing of experience by senior surgeons" (#8)

Next IITP at KCMC is planned (November 2016):

Next IITP week on TUR is scheduled in mid-November 2016 with following content:

- TURP and TURB as available cases (up to four cases a day in two OR = 16 operations)
- Lectures focus on
 - Preoperative assessment of patients with BPH/BOO – indication for surgery

- Patient safety
- Alternative surgical approach to BOO (e.g. TUR-IP, other methods)
- Short- and long term out-come after TURP– what can be expected?
- Infection and inflammation of the prostate
- Use of the WHO pre-operative check list
- Update on microbiological profile of urine culture (East Africa, Tanzania)
 - Consequences of antimicrobial prophylaxis/treatment
 - Antibiotic stewardship programme implementation
 - Promote the European Antibiotic day on 18 November 2016
- Continued discussion on the management of bladder cancer, defining a protocol (*)
- Further discussions on potential publications (e.g. case reports, clinical research, epidemiology of urological pathology)

Comments on bladder tumour (*)

Patients with bladder cancer usually present too late. Clinical experience shows clearly that patients have had haematuria for an extended period before attending a professional health care centre. The cases operated upon during the present week were of massive tumour size (TCC). The surgery is demanding and requires intensive training and supervision.

The number of bladder tumours cases in East Africa is reported to be noticeably increasing (WHO/International Agency for Research on Cancer IARC). There is also an increasing awareness in the population. Early diagnosis is thus a key issue to promote.

At KCMC, the number of TCC and SCC are in balance. After diagnosis with TUR-BT, the management differs however. There are local protocols, but the management of SCC is usually poorly covered in guidelines. This could eventually be improved.

Acknowledgements

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Approved by Dr Frank Bright

Magnus Grabe and Jacques Bogdanowicz
17 August 2016

Appendix 1

Discussion topics for TURBT

Date (2016)	Topic	Presentation
Monday 09 May	Normal appearance of the bladder at cystoscopy	Dr Orgeness (Tanzania)
	Preoperative considerations to avoid complications during and after TURB	Dr Kipapi (Tanzania)
Tuesday 10 May	Resection biopsies prostatic urethra and bladder neck	Dr Irungo (Kenya)
	Resection, when and how	Dr Mabedi (Malawi)
Wednesday 11	TURB “en-bloc” resection	Dr Masanja (Tanzania)
	Risk factors for recurrence	Dr Serwadda (Uganda)
	Bladder cancer and its differential diagnosis	Dr Chacha (Tanzania)
Thursday 12 May	Adjuvant options – chemotherapy, Mitomycin low dose protocol	Dr Serwadda (Uganda)
	Post-operation follow-up and management	Dr Sibomana (Rwanda)

Photos from the IITP course on basic endourology (KCMC, May 2016)



Dr J Bogdanowicz with the residents – preparing the early morning presentations



Resident performing TUR-BT for MIBC using also NBI. Difficult resection. Supervisor: F Bright



Dr Frank Bright performing internal urethrotomy for multiple urethral strictures



TURP by resident: step-by-step supervision and coaching (M Grabe)



MG finalising the procedure (due to long resection time)



Residents and supervisors sharing evening dinner in a friendly social atmosphere (a few residents are absent on the picture)



The lunch is served next to the teaching room