James A Hicks,
Specialist Registrar in Urology on the Wessex region.

Correspondence to:
James Hicks,
C/O Secretary to Mr Malone,
Department of Child Health,
Southampton University Hospital,
Tremona Rd,
Shirley,
Southampton,
SO16 6YD,
UK.

The Benefits of Paediatric Urology Training to the Adult Urologist

Introduction
Adult urology training is becoming more streamlined towards specific subspecialty training and specific procedures. This is leaving less time within the training period for registrars to widen their experience. This article discusses the benefits of devoting part of specialist registrar (SpR) training towards paediatric urology.

Paediatric patients with complex conditions or surgical procedures grow up and leave the paediatric unit in which they were born or have attended for much of their lives. They are then left in the hands of an unsuspecting adult urologist. It therefore seems justified on these grounds alone for adult urologists to have an understanding of paediatric urology above that which is obtained from a textbook whilst preparing for an exit exam. It is also prudent to remember that paediatric urology is a mandatory part of the FRCS(Urol) intercollegiate examination.

However, the counter argument will always centre on the best use of time within a six-year training programme, which has now been shortened to three years. As the face of urology and training changes, trainees will be pressured into learning a precise skill-set within a shortened time frame. New technologies allowing less invasive procedures all need to be learned and competencies assessed. So where does that leave paediatric urology for the adult urologist? Should trainees be encouraged to include paediatric urology in their training?

Why should urologists have training in paediatric urology?
In attempting to answer that question I rely on my own experience of working for six months in a specialist regional paediatric urology unit and outline the benefits of such a post. The number of intermediate and major open surgical procedures was far greater than I expected certainly when compared to adult practice. This allows development of open operating skills but with an added level of delicacy beyond that which adult surgeons are used to (how often do adult surgeons perform anastomosies with 7/0 sutures!). These difficult procedures give a trainee fantastic open operating experience, the techniques from which can be extended into their adult practice.

Reconstructive surgery
The exposure to reconstructive surgery has been invaluable. The delicate hypospadias repairs, of which there are significant numbers, is superb training for a surgeon wishing to take on complex urethral stricture surgery when many of the techniques are shared between the two subspecialties. For the budding oncology surgeon wishing to gain experience in bladder reconstruction, enterocystoplasty and Mitrofanoff procedures, although not everyday operations, are far more common than bladder reconstructions in most adult units.

Laparoscopy
Adult and paediatric urologists alike cannot escape the laparoscopic revolution. Adult urologists are hampered by the simple fact that nephrectomy is the most common procedure being performed laparoscopically and the problems with the steep learning curve with this operation are well understood. Paediatric urology offers many opportunities to the relatively inexperienced laparoscopic surgeon to develop their skills before embarking on laparoscopic nephrectomy. Operations, such as exploratory laparoscopy for an undescended testis possibly proceeding to a staged Fowler Stephens procedure

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or varicocele ligation, are much more commonplace in paediatric practice. For those who already have some laparoscopic skills there are no shortages of nephrectomies or pyeloplasties to consider performing laparoscopically.

The simple procedures

I am not for one moment trying to portray paediatric urology as a speciality full of only major procedures. Simple groin surgery and circumcision make up a significant part of the workload. As new consultants come through fewer of them are confident or trained to perform this surgery. Urologists are not alone in this as the same is occurring in general surgery. Someone has to be able to offer this service outside the major paediatric surgical centres and training in this surgery may just be the factor that makes you first choice at a consultant interview.

Facts and figures

Every year in England and Wales 35,000-40,000 paediatric urology cases are managed between district general hospitals (DGHs) and specialist centres. Department of Health figures show a shift of services away from the DGH setting towards the specialist centre especially in younger patients (0-4 years). This will need to be considered by the trusts that will ultimately have the final say as to what services will need to be covered by any new appointment. There is a shortfall in the numbers of procedures being performed in DGHs with the extra caseload being made up by the specialist centres. The majority of this work is non-specialised, being of minor or intermediate complexity with 90% being performed as a day case and much is routine penile and scrotal surgery. Much of this surgery could and should be performed more locally. This would increase the capacity within the specialist centres to treat the more complex conditions in an appropriate multidisciplinary setting. Therefore, there would seem to be an opportunity for adult urologists in DGHs to take up more of the paediatric urology. This could potentially be done under the mantel of the specialist centre as a 'hub and spoke' arrangement. This all depends on smaller units increasing the amount of paediatric surgery performed and this clearly has manpower and training issues as the main limiting factor.

The changing face of urology

So should the three to five-year new style trainee consider paediatric urology as part of their training? As subspecialisation increases and more units limit the range of activities being performed by individuals, it would appear to me that it is increasingly important for these trainees to gain competency in routine paediatric urological procedures. A consultant urologist is likely to play a greater role in day case / short-stay surgery, the setting in which paediatric urology procedures will take place. It would seem ideal for these surgeons to take up the present shortfall in this service.

A paediatric urologist must work closely with his / her nephrology and endocrine colleagues. This results in a greater understanding of general physiology and working nephrology, something that most adult urologists will admit to knowing less than they should. I have lost count of how many times I have been told to improve my knowledge of basic science and I know I'm not alone in that. Close relations with the nephrologists and endocrinologists changes that.

Conclusion

A viewpoint on modern training is that all surgeons should be trained and assessed for competency in specific operations and those procedures outside that person's immediate operation 'portfolio' should not be performed by them until the appropriate certification is achieved. However, we can all think of examples where in practice this is unrealistic.

An alternative viewpoint is that we are trying to train specialist surgeons with a broad enough skill set to allow them to adapt to the immediate problems in front of them. This brings me nicely round to the point of this article. Exposure to paediatric urology for adult urologists broadens their personal skills, hones their operative techniques and enhances their existing knowledge ready for life as a consultant when patients do not always have simple, easy to manage problems and at a time when the buck will stop with you. It is also a service that has been underdeveloped at a DGH level and so offers a candidate an additional string to his / her bow when applying for a consultancy post. Something we all need as competition continues to increase.

Take Home Message

- Paediatric urology training refines surgical technique.
- It also involves a greater number of reconstructive procedures and broadens surgical experience at a time when training is becoming narrower.
- It may also make an individual more marketable on the consultant job trail as paediatric groin / scrotal surgery is a service increasingly under provided for by many trusts.

Further Information

European Society for Paediatric Urology

A non-profit society whose main purpose is to promote paediatric urology, appropriate practice, education as well as exchanges between practitioners involved in the treatment of genitourinary disorders in children. Visit www.espu.org to learn more.