Delayed orchidopexy: failure of screening or ascending testis

Current guidelines recommend that orchidopexy for undescended testes (UDT) should be undertaken before 2 years of age because of the possible risks of torsion, infertility, and malignant transformation.

We conducted a retrospective audit on eight consecutive orchidopexies for UDT over a three month period in 1996 at North Tees and Hartlepool general hospitals. Median age of orchidopexy was 7.8 years (range 15 months to 10.5 years), and only 12% of the children were operated on when under 2 years of age. Following this we introduced joint guidelines for UDT screening at birth, 6–8 weeks, 6–9 months, 12–15 months, and during the preschool check. A re-audit was done after a five year period on all 99 children who underwent orchidopexy between January 2001 and January 2003. Median age (range) at orchidopexy was 5.2 years (15 months to 14.6 years) and was not significantly different to the first audit (p = 0.29). Only 14/99 (14.1%) of children were operated on before the age of 2 years. The majority (54.5%) of the children had orchidopexy between the age of 5 and 15 years.

Reasons for delay in orchidopexy in the 85 children were categorised into six groups.

Group 1: Suspected retractile testis: 23 (19.5%); 85 children were categorised into six groups. Group 4: System failure: 9 (7.7%); failure to attend appointments or children were lost to follow up. Group 5: Late surgical referrals: 2 (1.7%). Group 6: Uncertain cause: 22 (18.7%); we could not ascertain the exact reason for delay in this group because of lack of documentation of testis position at birth and early infancy. Diagnosis of UDT was late in these children, which could be due to failure of screening or ascending testis.

Ascent of a previously scrotal testis appears to be the likely cause for late diagnosis of UDT, rather than a failure of screening. This would explain consistently high orchidopexy age reported from all over the world, despite introduction of aggressive UDT screening. There is increasing evidence to suggest ascending testis (primary acquired UDT) is a common occurrence, outnumbering congenital UDT by a factor of two to three. Pathogenesis of primary acquired UDT is thought to be due to relative shortening of cord structures with respect to other tissues.

Optimal management of primary acquired UDT is not known, but there is some evidence to suggest that most of these would descent spontaneously into the scrotum during puberty and the testicular volume is not affected. Moreover orchidopexy carries a 5–6% risk of damage to spermatic cord structures, resulting in gonadal atrophy.

We conclude that late orchidopexies are probably due to orchidopexies being carried out on ascending testes in prepubertal boys. Is likely that many of these orchidopexies are unnecessary and the tests might descend spontaneously during puberty. There is a need for a national audit on the incidence of UDT to undertake large prospective cohort studies to establish the natural history of ascending testis.

Is it time for a European formulary of paediatric medicines?

All Italian physicians, nurses, and pharmacists have recently received, free of charge, the Guida all’uso dei farmaci per i bambini (Guide to the use of drugs for children). Considering the number of health professionals involved (about 600 000), the methodology followed, the completeness of the contents, the size of the book produced, and its free availability, this initiative, set up under the auspices (technical and economic) of the Italian Ministry of Health, is unique on both a national and international level. This formulary can be considered part of the cultural trials begun in the mid 1990s by the Royal College of Paediatrics and Child Health and the Neonatal and Paediatric Pharmacists Group, which led to the creation of a European register of clinical trials in children (DEC-net project; www.dec-net.org; contractQLG4-CT-2002-01054). The role of the European register is to handle essential data on completed and ongoing research as a useful resource for planning new studies, promoting communication and collaboration among researchers, facilitating patient access and recruitment into trials, preventing trial duplication and inappropriate funding, and ensuring that genuinely therapeutic efforts remain neglected.

The Sixth Framework Programme is currently running and “Medicines for children” is one of the specific topics. In 2004, the European Commission published a draft consultation document, Regulation of the European Parliament and Council on medicinal products for paediatric use, which is currently undergoing final revision.

The inevitable use of deduction as a means to obtain what is “probably” the best therapy for a child may gradually disappear, but the continued production and availability of evidence based information for health professionals and lay people has to be guaranteed. Children have the same rights as adults to receive safe and effective medicines. In such a context, guiding clinicians to ensure that children benefit from the medications they are given is a priority. A shared paediatric formulary would be useful in accomplishing this. A continuation of the efforts made in the UK and Italy, with the joint participation of different countries in an endeavour to set up a European formulary led up by an international committee, would be a valuable achievement and should be
unthinkable. Having been a junior doctor in Sydney the author came to London to work as a houseman at the Hammersmith and Bromptom hospitals. He then returned to Australia, before moving again to Zurich for further training. After this he spent five further years in Sydney before finally moving again to London to become a consultant/senior lecturer in child health. Bartholomew’s and Queen Elizabeth Hospital for Children (QEH), London. Along the way he undertook his MD. This was based on an analysis of the dissecting microscope appearance of irritable small intestine in children at postmortem examination who had died from both gastroenterological and non-gastroenterological causes. The fact that he could analyse 116 child autopsies over a period of 22 months, reflects the changing face of child health in the developed world, where diseases such as infantile gastroenteritis were frequently fatal not so many years ago, before effective oral or intravenous rehydration therapy was developed.

Subsequent chapters deal with issues which for many readers will be all too familiar. In the London context there is the permanent reversion of both hospital and medical school merger and restructuring which for Walker-Smith was particularly difficult: Barts merged with the Royal London and QEH closed. Then, more recently, in the last few years before retirement spent at the Royal Free, there was the controversy around the MMR vaccine and autism. It is interesting to read his perspective as someone at the very centre of events. For although he does not believe that “professional and research matters should normally be discussed in the public media”, but “should be discussed in scientific and medical media and at the relevant meetings”, the controversy has been the most widely reported medical media story in the UK for many years.

The final, and probably the most significant of the themes running through the book is that of the development of paediatric gastroenterology as a separate discipline within paediatrics but in an international context. There have been the technical advances from small bowel biopsy with Crosby capsule to fibreoptic endoscopy, the clinical advances in the management of failure and transplantation, and the laboratory advances in the microbiology of infections diarrhoea, and understanding of the mechanisms of mucosal inflammation. For those of us in the field this process continues. Although there have been some advances with, for example, the development of identifiable sub-specialist training schemes, many of the tensions documented in the book—specialist versus general paediatrician, academic versus clinical research—still persist.

John Walker-Smith describes himself as an inveterate collector, and in this autobiography he has drawn together his personal collection of memories, anecdotes, and most importantly people; some 400 are indexed. They are, as one would expect, mostly friends and acquaintances acquired during a distinguished career, although there is the occasional adversary or rival. For the younger reader many of the descriptions of life as a young doctor will be strikingly familiar even if separated by 30 or 40 years, while the image of early morning tea brought to one’s room by a domestic, and communal roast dinner carved by the resident medical officer are truly from another era.

The first half of the book describes a childhood in Sydney, following his father into medicine. His subsequent training followed a path that required a flexibility which with our current system would be almost indestructible. For the younger reader many of the descriptions of life as a young doctor will be strikingly familiar even if separated by 30 or 40 years, while the image of early morning tea brought to one’s room by a domestic, and communal roast dinner carved by the resident medical officer are truly from another era.

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