Paediatric Nephrology: Development as a Subspecialty

It was exactly 10 years when our Journal last published an issue on Paediatric Nephrology. Comparing the papers in the last issue in 1993 and those of the present, we can perceive how the subspecialty has developed and progressed in the last 10 years in Hong Kong. For example, at that time, we were still discussing how to tackle the problem of chronic renal failure in children, we are now reporting the favourable outcome of these children undergoing dialysis and renal transplant. Furthermore, instead of having only reviews from single centers, there are now also prospective collaborative studies from different hospitals. And with the setting up of a renal registry surveying on the different renal diseases, there are much more to be learnt. The subspecialty group has gradually matured.

Paediatric Nephrology encompasses a wide range of diseases and practices, from the common problems of urinary tract infection, renal hypertension, nephrotic syndrome and glomerulonephritis to the management of end-stage renal diseases which requires specialised and sophisticated procedures of dialysis and transplantation. In the present issue, Prof. Michael Dillon's paper on "What's new in childhood hypertension" highlights the imminent need to establish new device specific blood pressure normograms, and the usefulness of ambulatory blood pressure monitoring. He also addresses "white coat hypertension", the importance of systolic hypertension, newer investigatory tools and anti-hypertensive medications which are hot topics in childhood hypertension. The management of Henoch-Schönlein Nephritis has been controversial, lacking standard treatment regimen. The article on "Management options for Henoch-Schönlein Nephritis: Evidence-based approach" represents a good effort of the Glomerulonephritis Study Group trying to answer some management questions by reviewing papers and to suggest recommendations. Urinary tract infection (UTI) is probably the commonest nephro-urological problem and local data are helpful in clinical management. In reviewing 94 first presentation UTI, Fong et al noted that boys outnumbered girls by 3.5 times, and that 85% occurred in infants <1 year old. It was also noted that vesicoureteric reflux occurred in 23%, and the results were compared with other studies looking for changing epidemiology and ethnic differences.

The Hong Kong Childhood Enuresis Study Group had conducted a prospective multi-centres study looking into the problem of primary enuresis in Hong Kong children. In addition to studying the use of enuretic alarm and minirin, it also surveyed the prevalent parental and child attitudes towards the problem. In "Primary nocturnal enuresis: Patient attitudes and parental perceptions", Ng et al reported that much embarrassment was felt among
patients and psychological reactions were not uncommonly aroused. There were many misconceptions about the condition and a punitive attitude was still common in our local community, which might adversely affect parent-child relationship. The study was a good attempt in collaborating ten departments from nine hospitals to undergo a study recruiting more than a hundred patients. Lee et al\textsuperscript{5} also specifically looked into the use of early morning urine osmolality to see if it is a good predictor of response to oral desmopressin in children with primary nocturnal enuresis, but couldn't find a good correlation.

Haemofiltration has developed in recent years to become the mode of choice in managing acute renal failure especially in PICU settings. Wu et al\textsuperscript{6} shared the experience of haemofiltration in 17 children, illustrating its efficacy and safety. Chronic renal failure though much less common in children than adults, taps on resources and expertise. Strategically, it is important to prevent and slow its progression. Wong\textsuperscript{7} in "Can we prevent chronic renal failure in children" appeals to doctors of different sectors to be involved in identifying high risk patients, referring them early for proper workup and providing renoprotective treatment. Yet for those who have gone into end-stage renal disease (ESRD), dialysis and renal transplantation will need to be provided. Lai et al\textsuperscript{8} reported the experience of managing 32 children put on “Automated Peritoneal Dialysis” which had provided them a better quality of life than conventional CAPD. The incidence of peritonitis rate was very low as compared with other series. Ledermann\textsuperscript{9} in "Infant dialysis" shares the experiences of Great Ormond Street Hospital for Sick Children and discusses the success of dialysis in infants. Although much effort and resources are required and parental burden need to be considered, yet if infants have no other associated anomalies, the long term outcome of dialysis is generally good. Thus dialysis should be considered the standard form of treatment with a view of renal transplantation for these infants. For ESRD, the best treatment option is renal transplantation. It applies to adults as well as to children. Chiu\textsuperscript{10} in "An update on paediatric renal transplantation" summarises new developments in that area and sees how we in Hong Kong are doing. In fact, our results compare favourably with those overseas, though we are not yet doing it for the very young.

Urology has always been a good partner of nephrology, and it is important for the two to go hand and hand in providing services. Sihoe et al\textsuperscript{11} describe the latest advances of laparoscopy in paediatric urology. With such advances, many surgeries can be done with minimal invasion, including varicocele, intersex, nephrectomy, undescended testis, pyeloplasty, ureteric reimplant, ureterocele, bladder reconstruction and bladder neck procedures, etc. This is a big step forward in urological intervention.

Throughout these years, paediatric nephrology has evolved into a subspecialty requiring much specialised skills and techniques, like those necessary in haemofiltration, peritoneal dialysis, haemodialysis, and renal transplantation. On the other hand, common renal diseases e.g. nephrotic syndrome, glomerulonephropathies, and urinary tract infection associated with vesico-ureteric reflux also require expertise in management, which involve not only paediatricians, but urologists and other disciplines in many circumstances. It is through concerted efforts that we are able to provide satisfactory care to this group of patients and forward progress in the development of the subspecialty.

References


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Guest Editors