## **Editorial**

## The Changing Face of Urology

Perhaps the term 'changing face' is not appropriate in connection with urology but it implies what is meant in this instance. Sometimes it is salutory to sit back and review the progress which has been achieved in our particular field; this seems a suitable juncture in view of such recent developments as the extra-corporeal lithotripsy (or fragmentation of stones), and the combined transplantation of kidney and pancreas.

History is often compared with a wide, slowly moving river, arising in the mists of antiquity and passing on no man knows whither. Whereas medicine is more aptly compared with a relay race. Sometimes the steps are slow and the torch smoulders but, at other times, the pace is headlong and the flame burns brightly. The essential truth is, of course, that medicine cannot and does not stand still at any time, and there is always movement forward.

Spectacular advances have been seen in urology during the last 50 years, and it has been a great privilege for those of us who have been able to participate in all this rewarding activity. To some of our younger colleagues it may come as a surprise to know how young (in the terms of medicine), is the discipline of urology.

Forty years ago there were only a few urological departments in Britain, even in university centres, most of the work being carried out by general surgeons. It is perhaps not well known that orthopaedic pioneer, Hugh Owen Thomas (1888), wrote a paper describing a series of over 30 operations for vesical calculus which he had carried out by perineal urethotomy. There were then usually individual general surgeons with a special interest in urology and to whom difficult problems were referred, this group forming a bridge between the era of general surgery and the eventual urological department. In Liverpool, for example, there was no urological clinic prior to the early 'fifties when the urological centre at the Sefton General Hospital was first established. This pattern was repeated in many other university centres and, although there were certain urological clinics in London, Manchester, Glasgow and elsewhere (dating from before the recent war), these were largely individual efforts and had little research back-up. Following the war, however, urology advanced rapidly with the formation of the British Association of Urological Surgeons and the setting up of departments in many centres, usually involving active research activities.

A good example of the great changes is the transformation of prostatectomy from the blind Freyer operation (Freyer, 1902) to the modern TUR, by way of the Thompson-Walker (1920) Harris (1927) procedures, rapidly followed by the Wilson Hey (1945) and Millin retropubic (1945, 1947) methods. This change alone has brought tremendous relief to innumerable patients throughout the world. Similarly the first tentative steps towards the study of micturition were initiated by cystometry (Rose, 1927), the uroflowmeter (Von Garretts, 1956) and the sphincterometer (Cosbie Ross and Tinckler). Now there is available the

comprehensive studies of modern urodynamics, all within the compass of 50 years.

The cure of genito-urinary tuberculosis dates from 1949 and it is so easily forgotten that, before chemotherapy, 50 per cent of patients with renal tuberculosis were dead within 5 years. Similarly, the effective treatment of renal failure virtually began in the 'fifties. All this needs to be seen in perspective and I look back with gratitude to my visits to Leeds to learn something from Parsons (Parsons and McCracken, 1959) about the first kidney machine in the United Kingdom.

In the particular field served by our journal it is unnecessary to enumerate the steady progress in urology but it is salutory to remember that before the last war the mortality for injuries of the spinal cord was astronomical, the vast majority of deaths being from a urological cause within the year. The transformation of a desolute scene to one of hope was, of course, due to our founder, Ludwig Guttmann, under whose superb leadership the various problems of concomitant injuries, orthopaedics, urology etc were systematically tackled in a way which was an inspiration to us all. The steady advance from suprapubic drainage, the Foley catheter, the fine Gibbon catheter to the now generally accepted method of intermittent catheter drainage (Guttmann, 1949; Guttman and Frankel, 1966) is common knowledge.

During the same period knowledge of the intricate pattern of the vesicourethral structure and function was progressing and recognition of the condition known as external sphincter dyssynergia emerged; a classification of the types of bladder dysfunction also became possible.

These developments enabled surgical treatment to be rationalised. The indications for bladder neck resection were greatly narrowed and external sphincter dyssynergia was attacked in turn by anterior rhizotomy, (Cosbie Ross and Damanski, (1954) subaracnoid alcohol block, pudendal block (Bors *et al.*, 1950), pudendal neurectomy and finally by endoscopic incision of the external sphincter (Cosbie Ross, Gibbon and Damanski, 1957; Cosbie Ross, Gibbon and Sham Sunder, 1976).

This operation, external sphincterotomy, was originally introduced to deal with lower motor neurone lesions but it soon found a much wider application in upper motor neurone cases. The great advantages of the procedure are its safety and effectiveness together with the absence of complications, such as incontinence and impotence, provided it is carried out correctly. Now, in addition, there are a number of drugs available which improve minor examples of dyssnergia but have not yet succeeded in making the operation unnecessary.

Conquest of urinary infections is becoming a distinct possibility and damage to the upper urinary tract (with the dangers of renal failure), is much less frequent.

When giving one of his eloquent and stimulating addresses to the International Medical Society of Paraplegia some years ago, Herbert Talbot visualised a future regime for paraplegia which would be so excellent that the urologist, the orthopaedic and plastic surgeons would no longer be necessary. Although much progress has been made towards this goal there is still work and research to be done by all three disciplines.

Although in medicine it is always important to remember the warning by TS Eliot (1909–1962) when he says.

'Where is the wisdom we have lost in knowledge? Where is the knowledge we have lost in information?'

I say, in spite of this, the great surge forward of urology during the half century has made its tiny contribution to making the world a happier place.

J. Cosbie Ross

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