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Urological cooperatives[1]

Cooperatives are groups of people working towards the same end, and at a time when urology is advancing steadily in this country it is a salutary experience to consider how the philosophy of the cooperative might affect its progress. It is generally believed that urology has achieved a high standard and that improvements in its practice will be marginal and infrequent. Successful surgery of renal stones, prostatic obstruction, urethral strictures, bladder and renal malignancy, congenital abnormalities of the renal tract and urethral strictures, is now the major part of the well-trained urologist's routine work. However, this should not be the whole story, unless urologists are to stagnate and become merely practising technicians. How then should the talent of urologists be channelled? The new approach must surely be to return to the scientist and to integrate the basic sciences and clinical departments to a far greater degree. Pharmacology, biochemistry, endocrinology, immunology and nuclear medicine, to name but a few, are encroaching more and more into clinical practice and it is up to us to collaborate with them and to use their expertise not only by setting up joint clinical sessions but also by initiating collaborative studies. Without these basic sciences urology will not progress.

[1]Based on Mr J G Gow's Presidential Address to Section of Urology, 23 October 1980

It will perhaps have been noticed that all meetings of the Section of Urology for the 1980/81 session are joint meetings with other Sections of the Royal Society of Medicine. This is because I am firmly convinced that urologists do not make enough use of the skills and knowledge possessed by other disciplines.

Three very different subjects – genitourinary tuberculosis, male infertility and endoscopic photography – emphasize the benefits to urology of the contributions of other disciplines.

Genitourinary tuberculosis

Genitourinary tuberculosis still poses many problems for the urologist, but the major advance in recent years has been the introduction of short-course chemotherapeutic treatment following the discovery of rifampicin in 1966. This was pioneered by Professors Mitcheson and Wallace Fox and clinically confirmed by extensive controlled trials on patients suffering from pulmonary disease in different parts of the world (Fox & Mitchison 1975). Satisfactory results can now be achieved after 4–6 months continuous treatment.

The treatment regime for genitourinary lesions is divided into two phases – an initial intensive 2-month phase consisting of rifampicin, isoniazid and pyrazinamide with streptomycin occasionally added in severe lesions, followed by a less intensive phase of isoniazid and rifampicin, either daily or three times a week for a further 2 or 4 months. Genitourinary tuberculosis has particularly benefited from the work of the microbiologists, immunologists and physicians, as the diseased renal tract lends itself especially well to this form of treatment because of its extensive blood supply.

Male infertility

For many years physicians have been trying to find effective solutions to the enigma of the barren marriage. Until recently their attempts had been singularly unrewarding. Yet these are hopeful developments. The recent discovery of sophisticated biochemical methods for measuring the hormones and their metabolites is producing valuable information. The surgical treatment of varicocele is rewarding and surgery of congenital deformities of the external genitalia must improve the potential for fatherhood in the future.

For a long time, patients with azoospermia, fructose in the seminal plasma, normal testicular function on testicular biopsy, with an enlarged epididymal head showing blue areas separated by dilated ducts containing lipoproteins, were thought to have an obstruction between the body and head of the epididymis for which epididymovasostomy was recommended. This view was challenged by Hanley & Hodges (1959) following

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microdissections of the epididymis: 'This work has been continued by our unit and careful serial sections of the epididymis carried out. The preliminary view is that the changes are probably congenital but the investigation involving histologists, serumologists, endocrinologists and anatomists who are carrying out the microdissections, is continuing. It is hoped that this work will ultimately once and for all destroy the obstructive theory and make the operation of vasoepididymostomy for this condition obsolete'; a view that is now accepted, except in those cases where the obstruction is due to an inflammatory lesion involving the tail of the epididymis.

Endoscopic photography

It has been the ambition of a number of urologists to portray accurately by colour photography lesions of the bladder seen through the cystoscope. It was only after the legendary contribution to endoscopy by Professor Harold Hopkins (1960), in which improvements in optical design and light transmission opened a new dimension in the technical approach to still photography, that this ambition became a reality and an accurate interpretation of pathological lesions was achieved. There are, however, still problems to be overcome as the standard telescope is restricted to 4 mm diameter which does not allow sufficient light to be transmitted for constantly good photographs of all bladder lesions, even with an external source of light as powerful as a 500 watt xenon arc. It is possible that further developments in external flash units will improve the results, but the size of picture will be limited. The answer at the present time is a powerful external light source such as the xenon arc, a telescope containing a much larger number of fibres and an automatic camera which will adjust the exposure time according to the light reflected from the bladder mucous membrane. The laparoscope telescope would seem the ideal instrument for this purpose as all it requires is a special extension piece to fit the cystoscope sheath.

These three urological topics point to the part that the Royal Society of Medicine, with its interdisciplinary facilities, can and ought to play. No man can even tell how much he knows until he arranges his knowledge and then he appreciates how defective it is. If only our wisdom would grow in proportion to our stature. None of us has any divine right to knowledge, however small, that we may be fortunate enough to possess. We are merely guardians or servants of such knowledge and it is up to us to share it with as many people as possible in free discussion and so spread the bounds of learning.

John Hunter, one of the first great surgical scientists, said: 'the last part of surgery, namely operation, is a reflection on the healing art and a tacit acknowledgement of the inefficiency of surgery. It is like an armed savage who attempts to get by force what a civilized man would achieve by stratagem'.

This exhortation of John Hunter strengthens the firm belief that urologists must turn more to the scientists for future advances in the management of many urological problems, but it must always be a joint enterprise. Scientists or researchers should not be left on their own as they tend to be easily sidetracked and consequently lacking in direction. Nevertheless, they are an essential part of the team, and I envisage groups embracing scientists, clinicians, research workers, even members of the public, woven into a particular fabric, which will constitute an intellectual force which will organize the advances so essential for progress in medicine. We must therefore endeavour to ascertain the delicate relationship between structure and function, which can only be achieved by such an affiliation between many scientists working in interrelated disciplines.

Milton, in 'Paradise Lost', said: 'United thoughts and counsels equal hope and hazard in the glorious enterprise': a wise philosophy which if followed will bring rewards to everyone, not least our patients, which will be great and abiding.

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President
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Crohn's disease and arthritis

There is a complicated, overlapping relationship between Crohn's disease, ulcerative colitis, spondylitis, peripheral arthritis, acute anterior uveitis, psoriasis and erythema nodosum. This relationship probably results from multigenic inheritance, possibly with many genes contributing to susceptibility to varying patterns of disease (Brewerton 1978). As many combinations of clinical features are possible,

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