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# CLINICAL SCIENCE VOLUME 70, SUPPLEMENT NO. 14

## Role of the Sympathetic Nervous System in the Lower Urinary Tract

A Workshop held in London, April 1985

MEDICAL RESEARCH SOCIETY AND THE BIOCHEMICAL SOCIETY LONDON 1986 In the preparation of this Supplement for publication Dr R. Wilkinson of the Editorial Board of *Clinical Science* acted as Editor-in-Chief.

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#### **Conclusion**

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I am sure you will agree that this has been a most interesting meeting.

Contemplating the problem of bladder function is rather like a view of the moon; most of us only see it from one side. However, the expertise of our speakers have combined to review it from all aspects, and this is a special advantage of this sort of multidisciplinary symposium.

The bladder detrusor is unique in being the only smooth muscle that is under absolute voluntary control; precisely how this is mediated by the autonomic nervous system is difficult to understand — but this is the reason we are here. We are equally perplexed about many aspects of the function and control of the smooth muscle mechanism of the bladder neck and of the composite distal sphincter mechanism which is entirely confined to the wall of the urethra itself in both the male and the female, the mythological concept of a competent sphincter mechanism external to the urethra having been recently finally dispelled.

In fact there are so many things about the function of the bladder and the sphincters that we do not really understand that we are still in the business of collecting and collating measurements and observations and trying to keep an open mind about 'how and why things work', because premature concepts based on insufficient knowledge are often simpler to understand than reality — and not infrequently prove erroneous.

I trust the bladder feels flattered by all the attention it receives, but I sometimes wonder whether it knows how it is supposed to react to drugs we offer it; certainly it does not always respond in the way that we hope that it will. Perhaps it is in a comparable situation to that of the bumblebee, which has been described as a structure which, on the

basis of accepted aerodynamic principles, cannot possibly fly — fortunately the bumblebee does not know about these things so it flies anyway!

Our ability to communicate stems from agreement upon the use of words and the definition of terms so that, unlike Lewis Carroll's Humpty-Dumpty, we all endeavour to mean the same thing by what we hear and say. All of us owe a great debt to the International Continence Society and its Standardization Committee, which has contributed so much to international communication and enabled so many meetings to focus upon the real problems, rather than argue about definitions. Even such a simple thing as eradicating the measurement of urinary tract pressures in millimetres of mercury took considerable time and effort.

We are particularly grateful to our speakers for taking time to show us their work and thoughts, many of which were not previously available in published form. We gathered to share both our knowledge and our problems and we hope that the feedback, not only between each other as investigating doctors, but also between drug manufacturing colleagues, will stimulate interest and improve the treatment of our patients. We very much appreciate the efforts of Euan Milroy and Roger Kirby who convened this meeting.

It is my special privilege to thank Pfizer Ltd for their help and support of this conference, without which it could not have happened, and I would be grateful, Dr Mitchell, if you would convey our appreciation to all concerned.

Finally we thank you all very much for coming to join in, exchange views and create most interesting discussions. We hope that everyone of us will have found something further to think about.

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