

Essay Review

J. D. SWALES (editor), *Platt versus Pickering: an episode in recent medical history*, London, Keynes Press (British Medical Association), 1985, 8vo, pp. [vii], 155, illus., £45.00.

Collected in a finely produced volume, the main pieces of the long and famous debate between Robert Platt and George Pickering about the nature of essential hypertension are particularly welcome and timely. Indeed, the debate has not only a historical interest as if today hypertension research delights in looking back at its roots, in revisiting the battlefields or, more properly, the tourney arenas in which it has developed. The fact is that, consciously or unconsciously, the debate is still going on, and this volume is a good opportunity and a healthy stimulus to discover how much of one side of the debate is yet concealed under the other, though the latter side is now considered as common wisdom and orthodox teaching.

Professor John Swales, the editor of the publication, has made an excellent selection from the most important and pertinent writings of the two combatants and has admirably summarized the terms of the debate and its evolution in time. The technical controversy, as is well known, started about the unimodal or bimodal appearance of blood pressure frequency distribution curves, went on to the interpretation of hypertension as a single-gene-inherited disease or a multiple-gene-inherited condition, enlarged over the more philosophical issue of qualitative versus quantitative diseases. The essence of the debate was that in Platt's view hypertension was an inherited *disease* with dominant type transmission, with a specific (though unknown) defect, with a well-known natural history and with discrete lesions; whereas, according to George Pickering, hypertension was only the upper portion of a continuous distribution curve of blood pressure values, and, as blood pressure, depended on multiple-gene inheritance.

In reading again all the arguments of the controversy together, one can see why the debate dragged on so long and was so long undecided. The first reason is that the data were rather scanty and the conclusions somewhat inferential and indirect. The number of Platt's observations was surprisingly small (350 sibs of 178 patients in his last paper), and George Pickering had an easy task in pointing out that any number of peaks could appear by mere chance in the distribution curves of such a small number of observations. Pickering's data were by far more numerous, but their manipulation to obtain age- and sex-adjusted scores, the different number of peaks described when the initial data were re-calculated by Platt, the confusing argument of digit preference in measuring blood pressure values, all these aspects caused some perplexity and certainly delayed the acceptance of Pickering's views. It is no surprise, therefore, that among the sharp comments, the ironic remarks, the lengthy analyses of the available data, the most often recurring argument on both sides is that "the onus of proof" is on the other combatant (Pickering about Platt, p.78) or that "his [Pickering's] arguments do not prove his contentions" (Platt about Pickering, p.110). With the passage of time, the continuing fireworks mask a considerable softening of both positions. In their final contributions to the debate, Platt admits "I never believed that it would finally turn out to be something so simple", and "I never claimed that this [i.e. single-gene inheritance of hypertension] is more than a hypothesis" (p.135), and Pickering concedes "I never denied the possibility that there may be a group in what we now call 'essential hypertension' characterized by single-gene inheritance" (p.136).

There is no doubt that another aspect that prolonged the debate was the pleasure for controversy, the personalities of the two antagonists. Both were public figures in Great Britain and in the international medical world and, so to speak, had to live up to their public images. Certainly, they both had good weapons for scientific and logical fencing and delighted in doing so. One of my first impressions as a young investigator entering the public arena of hypertension at the Berne symposium in 1960 was the lively Pickering versus Platt debate, the knight crossing swords with the baronet, Pickering's sword being his well-known stick. The taste for controversy and for paradox sometimes concealed the ever-present academic restraint from the reader. Sir George's polemic verve, for instance, may have given the false impression that he was against treatment of what he strongly contended was not a *disease*:

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“Now it [i.e. symptomatic treatment] takes the form of drugs, whose ability to produce disturbing symptoms in the recipient has been amongst their most remarkable properties” (p.88). Then comes what has now become a popular aphorism: “Nor is there any evidence that such measures prolong life – though no doubt it seems longer”.

George Pickering’s conception of hypertension was long resisted by the large majority of investigators and clinicians. Having participated in both the Prague and the Berne symposia, held in 1960 at the height of the Platt versus Pickering debate, I well remember the strong objections made and the distaste shown by most participants for the quantitative hypothesis. It may seem strange that Irvine Page was so long on the skeptical side, as his mosaic theory of hypertension and his conception of hypertension as a derangement of regulation were not so far from Pickering’s hypothesis of multiple-gene inheritance and quantitative rather than qualitative deviation.

If Sir George’s quantitative conception was so widely and strongly resisted, why, almost all of a sudden and after the fireworks of the debate had burnt out, did it become tacitly accepted and – as mentioned by the editor of the volume – common wisdom and orthodox teaching? I think it was first, the mounting evidence from epidemiological studies in the 1960s that high blood pressure was a risk factor for cardiovascular disease, and a risk factor of progressively quantitative importance with progressively increasing blood pressure values. Second, it was the favourable outcome of the first intervention trials all concordantly showing the benefits of reducing high blood pressure, and the conclusion that in treatment of hypertension what really matters is reducing blood pressure, not how blood pressure is reduced. In this way, Sir George’s quantitative conception can be considered as the logical foundation of antihypertensive therapy, in the same way as the success of antihypertensive treatment has been tacitly received as a confirmation of the assumption.

There are some paradoxical aspects in the story of the Platt versus Pickering debate, however. In his introduction, John Swales rightly points out the different traditions in British medicine the two combatants embodied: Pickering was firmly in the clinical science camp, whereas Platt privileged “discovery by deliberate and relevant observation”. Paradoxically, Pickering’s conception of hypertension was clearly based on deliberate and relevant observation more than on research and was even accused of leading to therapeutic nihilism and hindering research. Platt’s arguments, on the other hand, were more strongly directed toward the experimental search for the specific fault responsible for hypertension, and could be accused of persuading young men into that “ploughing the same furrows” that was, in Platt’s view, the fault of academic medicine.

Another paradoxical outcome of the controversy relates to the current debate on treatment versus non-treatment of so-called “mild” hypertension. Pickering’s quantitative conception of hypertension as a risk factor of continuously increasing importance and his studies on population blood pressure are undoubtedly at the basis of the philosophy of increased risk in large populations that is preached by those favouring treatment of even mild elevations of systolic or diastolic blood pressures; a philosophy that George Pickering, as a clinician, strongly opposed.

In the last decade, George Pickering’s conception – as the editor correctly remarks in his conclusions – has become common wisdom and orthodox teaching. Certainly so, but is it all really so simple? Everybody is now paying tribute to the quantitative hypothesis, but how much of this tribute is lip-service, and how many statements in current medical literature on hypertension are not substantially different from those in the conclusive report of the Prague 1960 symposium from which George Pickering wanted to withdraw his name? I am thinking, for instance, of current research on membrane abnormalities, ion transport, ouabain-like natriuretic agents, or on specific characteristics of juvenile borderline hypertension, the results of which are often reported in a way that is incompatible with Pickering’s conception. Finally, how far did the increasing cautiousness in Platt’s and Pickering’s later statements reflect a defensive attitude and some weariness of an endless debate, or was it wise academic restraint and the feeling that the matter was not “something so simple”? In his last statement of the problem in 1964, Robert Platt recognized that the real problem was not single- or

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multiple-gene inheritance, but the existence or non-existence of two or more populations, of people liable to develop hypertension and others who are not. Phrased in this cautious way, this is a hypothesis that we often read in hypertension literature today. At the same time, George Pickering, in conceding that a small group in what we call essential hypertension may be characterized by single-gene inheritance, remarked that, rather than from irregularities in frequency distribution curves, it might be identified by the demonstration of a specific biochemical fault.

In conclusion, if the debate on the nature of hypertension is now silent, this does not mean that all problems are solved and that there is no outspoken or unspoken disagreement. The fact is that there are no longer such prominent figures, such eloquent combatants as George Pickering and Robert Platt certainly were. If civilized dissent is an indispensable requirement for scientific understanding, this is perhaps more a sign of decadence than a mark of wisdom.

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