## Lister Unobserved\*

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## SUMMARY

This is a brief historical note, derived from medical records of the time, of Lister's presentation of his revolutionary concept of the Antiseptic Principle to the 35th Annual Medical Meeting of the British Medical Association in Dublin, in 1867. That absolutely no notice was taken of this communication, whose content was to become the basis for our most advanced modern surgery of all kinds, by anyone in his audience; that, in fact, there was not the briefest mention made of it by anyone who had anything at all to do with the meeting, is the reason for submitting this evidence as an ever-recurring lesson to be learned.

S. Afr. Med. J., 47, 75 (1973).

## THE ANTISEPTIC PRINCIPLE

It is remarkable that so many great physicians of olden times become forgotten, although their names continue to be mentioned in the pages of history. It was not only by their actual practice of medicine, but still more by influence of their writings upon contemporaries and those who followed after, that they achieved such wide recognition. Today these famous men would have their profoundest teaching scorned, even ridiculed, by our modern scientific students of medicine.

So, what was it that contributed towards the eminence achieved by these physicians famous in their own time; why are they, when they are referred to at all today, regarded with a measure of historical reverence?

A man of Lister's eminence, for instance, could be found unobtrusively drinking a cup of tea at the Congress Room in Dublin, having listened to collegiate profundities which signified nothing, during almost the whole of the 35th Annual Meeting of the British Medical Association. With surgery reaching for the ultimate, it is not realized by several generations of medical men, that when Lister introduced his principle which was to revolutionize the practice of surgery, he was not only insignificant among the famous men of his time, but neglected by them, and unobserved, except by his immediate colleagues and students.

The initial momentous surgical papers to the *Lancet*, which published Lister's preliminary work on 16, 23 and 30 March, and 27 April 1867, and his ultimate historical documentation of the completion of his research in the field, which he presented at the Annual Meeting in Dublin, in 1867, went by unnoticed.

A remarkable fact, was the publication of this phenomenal paper 'On the antiseptic principle in the practice

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of surgery', on the same day in both the *Lancet* and the *British Medical Journal*, 21 September 1867, only a few days after it had been read in Dublin. In these journals it was not even editorially noticed, and the profession in England received it with as little enthusiasm, as did Lister's audience in Dublin. It is to their credit, however, that Lister's German colleagues in Europe recognized the epoch-making content of his publication, and assessed its true worth.



Fig. 1. Joseph Lister as he appeared in 1867.

Among the distinguished surgeons of Europe, who hailed Lister with enthusiasm, were Thiersch, von Volkmann, von Nussbaum, and von Bergmann, who became loud in their praise after putting Lister's principles of surgical antisepsis into practice, so converting their 'hotbeds of sepsis' into 'houses of healing'. In England, senior surgeons of similar status but gifted with less insight, barely lifted an eyebrow in recognition of this historical surgical event.

The last sentence of Lister's surgical treasure runs thus: 'As there appears to be no doubt regarding the cause of this change (from the unhealthiest wards in the whole surgical division of Glasgow Royal Infirmary, to the healthiest), the importance of the fact can hardly be exaggerated.'

'Exaggerated', Lister said—the fact was not even observed!

To revert to the *Lancet* of 16 March 1867, in which Lister's first paper of his small series appeared, entitled, 'On a new method of treating compound fracture, abscess, etc., with observations on the conditions of suppuration', there also began a series of articles by Dr Charles Murchison on liver disease; there were case reports; reports of the Sanitary Commission; and the Leader had some comment to make on a recent essay by Von Liebig, entitled 'Die Entwickelung der Ideen in der Naturwissenschaft.' In this essay von Liebig discoursed on the evolution of scientific ideas, and those readers of the *Lancet* who were so blinded by von Liebig's ideas, could not see the scientific truths in Lister's article.

Micro-organisms had been recognized for almost 2 centuries before Lister's time, and Pasteur had propounded the germ theory of fermentation. Carbolic acid was known to Lister for its remarkable effects upon the foul sewage of Carlisle in 1866. The concept that chemical substances could prevent putrefaction was known well enough for later correspondents of the medical journals, also famous men, to decry Lister and his work. These influential men who opposed Lister, just could not read the secret, spelled 'Antisepsis', which was unique in its conception, and enabled Lister to write to his father, 'I now perform an operation for the removal of a tumour, etc., with a totally different feeling from what I used to have; in fact, surgery is becoming a different thing altogether.'

Despite the centenary celebrative editorial comment on the original publication of Lister's paper on the antiseptic principle in surgery, there is no mention at all that Lister actually read this revolutionary document at that meeting.

Let us revert again to the *Lancet*, but this time to No. 7 of volume II of Saturday 17 August 1867, published in London. The journal gives an account of the remarkable annual meeting of the British Medical Association; remarkable for its profuse inanity of contributions by great names of that time; for the social swirl and whirl of a kind the members had not experienced before; and for the neglect of so great a man as Lister, who was then just 40 years of age, and his historic contribution.

One point which immediately comes to mind, is that of the Editor deploring the scientific sterility of this grand meeting, yet even he was unable to see the jewel for its sumptuous setting.

When Lister's contribution was published in the *Lancet* of 21 September 1867, for the information of those who were not present at the annual meeting, and perhaps for those who were, a footnote to the paper ran: 'A paper

read before the British Medical Association in Dublin on the 9th of August, 1867'. How heedless can anyone be of history in the making?

## **CONCLUSION**

If the study of medicine is a unique instance of higher education, then the study of the history of medicine is indispensable, and, to slightly paraphrase a thought of Bacon's, a knowledge of medical history makes a wiser physician and surgeon.

Although writers who have commemorated Lister's achievement, and others who have written biographical matter, mention the fact that Lister read his paper on the antiseptic principle at the 35th Annual Meeting of the British Medical Association, in Dublin, none ever hint at the absence of all notice of this occasion. There is implied that it was given a 'mixed reception', but this was a comment derived ex post facto, when murmurings had eventually become audible in the big city of London and elsewhere, which was a result in all likelihood of stimulation from across the channel; for Lister was significant in Europe, when he was scarcely recognized at home.

To remind ourselves in the words of Hector Cameron that: 'Lockjaw, erysipelas, blood-poisoning of various kinds, and hospital gangrene were never absent from the hospital wards at any time, and repeatedly gangrene and pyaemia—a most fatal form of blood-poisoning—became alarmingly epidemic,' and when physicians knew no effective way of combating these diseases, it is all the more astonishing that any idea which might in some way be developed for the prevention or cure of these conditions, was not snatched at with both hands by the seekers after knowledge.

Lister, however insignificant he may have been outside his own hospital, was no crank, no mountebank, no quack selling to the gullible profession. He was indeed a man of the highest integrity, descendant of a family of that quality. He said: 'The main object of my life is to find out how to procure this result in all wounds', after an occasion when he showed to those about him a wound that was healing without suppuration.

So often the devoted searcher after truth, not for the sake of truth itself, but for the sake of alleviating the afflictions to which humanity is liable, is the quiet, unpretentious man of integrity, who places purpose above self, and in so doing enhances his own virtue but who very often remains unrecognized, even by men of high repute.