The cutting edge of medicine a century ago

What were the exciting topics in the wide field of medicine 100 years ago? An interesting way of judging this is to glance through the detailed reports in the *Lancet* of 1910 of the British Medical Association Congress in London, held in the July of that year, with reviews of its 21 sectional meetings.

The hot topic: syphilis

A century ago, syphilis represented the AIDS (acquired immune deficiency syndrome) of today in terms of world importance and was at a time of major diagnostic advances and interest; indeed, it was a 'hot topic' in three of the sections – dermatology, bacteriology and venereology (as sexually transmitted diseases was called in those days). The spirochaete, *Treponema pallidum*, had only been discovered 5 years before, by Fritz Schaudinn of Berlin, and this enabled specific diagnosis of the early lesion at last.

In 1906, August von Wassermann, an assistant of Robert Koch, had introduced his complement fixation test for syphilis. Because the organism could not be cultured, he used extracts of the livers of syphilitic fetuses as the source of the antigen. Wassermann himself was due to appear at the meeting but was unable to attend and his paper was given in absentia. He noted that many modifications to his test had been introduced, but that increased sensitivity led to more false positives, and most speakers later echoed this. He noted that in 10 000 cases using the original method there was no example of a false positive, while a negative reaction was correct in 90% of cases.

While diagnostic tests had thus been revolutionized, and their impact now gave rise to much interest and discussion, there was little new in the way of treatment. There were learned debates on how best to use mercury, the standard treatment, whether by pill, inunction by massaging through the skin, or by intramuscular injection. Treatment would have to continue for up to 4 years, hence the old saying that: 'A night with Venus may lead to a life-time with Mercury'. Its use was combined with potassium iodide in tertiary disease. Various arsenical drugs were discussed, but the consensus was that arsenic was more toxic and less effective than mercury. Little did anyone in the audience realize that the following year Nobel laureate Paul Ehrlich, of Frankfurt, would introduce the synthetic organic arsenical compound Salvarsan as an effective (although toxic) treatment of the disease – the first drug of modern chemotherapy.

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Obstetrics and gynaecology

The section of obstetrics and gynaecology met, interestingly, under the chairmanship of a woman – Dr Mary Scharlieb, one of the first female graduates in this country, gynaecologist at the Royal Free Hospital and later appointed a DBE. The main subject for discussion was one of immense importance in those pre-antibiotic days, the causes and prevention of puerperal sepsis. The speakers agreed that infection was nearly always caused by bacteria introduced by the operator and was only rarely caused by vaginal organisms.

Professor Doderlein of Munich stressed that vaginal examination in labour should be kept to a minimum and always with the protection of indiarubber gloves. There was strong support for this from other speakers, but the one dissenter complained that their expense prohibited the use of indiarubber gloves among the poor.

Surgery

The section of surgery was lively and enjoyed world-class speakers. Theodor Kocher of Berne, awarded a Nobel prize that year, spoke on exophthalmic goitre. He stressed that, with few exceptions, the diagnosis could be confirmed by a fall in the ratio of polymorph leucocytes and an increase in lymphocytes in the peripheral blood – something I have never heard of and cannot refute or deny. He also stressed that iodine should not be given preoperatively – again, something that certainly goes against modern teaching. However, it cannot be denied that he was the surgeon who refined the operation of partial thyroidectomy in this condition, in the days before effective drug treatment. He had operated to date on 4394 patients with thyroid disease, 469 of them with Grave's disease. In his early experience with this latter condition, he had an operative mortality of 5%, but had only lost one patient in his last 72 cases.

His paper was followed by one from George Crile of the Cleveland Clinic, famous for his technique of 'stealing the thyroid' in these desperately ill patients, using heavy sedation and local anaesthesia.

Tropical medicine

A sign of the times 100 years ago, at the height of the British Empire, is reflected in the paper by Sir Richard Havelock Charles KCVO in the section of tropical medicine. Opening the discussion on 'Factors influencing the suitability of Europeans for life in the Tropics', he said that the man best suited to bear the white man's burden under these circumstances was: 'A good ordinary type of Britisher, with a good head well screwed on, a good temper but not over intellectual'. He should have 'good health, good teeth, a healthy appetite and a chest with plenty of expansion'. One of his best assets would be 'a wife, a true woman, built on the same lines as himself – one that could amuse herself and find interest in her house'. Ah, those were the days! BJHM

Conflict of interest: none.