Osler on Leprosy

TO THE EDITOR:

Much of Sir William Osler's medical practice ([1]) and many long sections of his famous textbook ([5, 6]) dealt with illnesses such as typhoid, tuberculosis, malaria and parasitic diseases, which have now largely been banished to the care of physicians in tropical developing countries. In spite of this, it is surprising to find that Osler wrote on leprosy ([7–10]) since he states that "One of the most striking differences between diseases of this continent and those of Asia or Africa is the absence of leprosy" ([9]).

There were only a few hundred patients with leprosy in North America in Osler's time. He gives their distribution as follows: "In the northern part of New Brunswick leprosy has existed in a couple of counties since the early part of the century. The cases as recognized are segregated in the lazarette at Tracadie .... Leprosy in Cape Breton has almost died out .... In British Columbia the disease has been introduced by the Chinese, but ... there are only eight cases at present in the settlement on Darcy Island .... Among the Icelandic immigrants in Manitoba there are a few cases .... to "New Scandinavia," as parts of Minnesota and Wisconsin have been called, the disease was introduced by the immigrant Swedes and Norwegians .... The disease has not spread .... In California leprosy has been intro-

duced by the Chinese . . . . The total number of cases . . . not more than a dozen . . . . By far the most extensive focus of leprosy is in Louisiana . . . . where it has been known since 1785 . . . . the number . . . not less than 300 . . . . A few cases of leprosy are met with in Florida, South Carolina and in others of the Southern States. Now and again cases occur in the eastern cities, invariably imported . . ." ([10]). And giving a flavor of the times: "In the question of the annexation of Hawaii the danger of leprosy has also come up. This really would not be a serious objection . . . barely one per cent of the population of the Sandwich Islands has leprosy." ([10])

Readers of his articles on leprosy will be charmed by the Osler style, envious of the relaxed and expansive writing of a bygone era of medical journalism, embarrassed by the use of the shorter, now opprobrious, term for "leprosy patient;" and surprised by the lack of specific bibliographic references—until reminded that in those days medical libraries were unavailable to most of Osler's readers ([3]).

Osler's first writings on this disease appeared in 1887 ([7, 8]) and were prompted by an affair about which "The public and the profession of Philadelphia have recently been much exercised on the subject of leprosy." ([7]) Two patients, a woman and her daughter, from Brazil were "under the care of Dr. Van Harlingen, who recognized the nature of the disease, but humanely refrained from telling the patients." ([8]) The storm broke when Dr. Harlingen "read a paper at the County Medical Society, in which these cases were described, and one patient was shown to the members. The affair, of course, became public; the daily papers took up the matter, and the Board of Health" . . . stepped in, asked for the address of the patients, "and added the disease to the list of contagious affections of which, under a penalty, notice must be given to the authorities." After resisting for some time "Dr. Van Harlingen gave up the patients, and the Board fined him $100 for failure to comply with the By-law." ([8]) The patients were placed "in strict confinement in the Municipal Hospital, and . . . made aware of the nature of their terrible disease. A number of prominent physicians, feeling that Dr. Van Harlingen" had been "rather hardly treated, . . . subscribed to pay the fine . . . ." ([8]) Perhaps Osler was one of the subscribers.

Modern readers will find many similarities between the reaction of society a hundred years ago to patients with leprosy and that of today to patients with the acquired immune deficiency syndrome. All this was of course before dapsone, when leprosy was untreatable, disfiguring, deforming, and often fatal. Osler in his editorials noted that the infectious nature of the disease had been accepted by most authorities at the time of his writing, and while there was a case for segregation in endemic areas, alarm need not be aroused by the presence of isolated cases in the community ([7, 8]).

Two years later in the summer of 1889 Osler visited the lazarette at Tracadie on the coast of New Brunswick ([1, 2, 5]), where the condition of the patients had been much improved after their care was taken over by nursing Sisters in 1868 ([4]). At the time of Osler's visit only 18 patients were still housed there ([5]). The visit and the journey of several days to Tracadie was made in the company of two friends, one of whom, the recently widowed Grace Linzee Gross, Osler married three years later ([2]).

Osler's first patient with leprosy was a well-known orator to whom he frequently refers ([5, 6, 9]). "There is a very remarkable illustration of anesthetic leprosy on this continent. The gentleman is dead now, and as I have heard others speak of the case I think I may now mention it without a breach of professional confidence. The patient was a preacher and when about 40 years old began to have anesthesia in the hands. He burnt his hands once while stirring the fire for his wife and did not know it until she told him. He consulted physicians in this country and London and received no satisfaction until he consulted Brown-Séquard. He went over the case carefully and finally asked where he came from. On being told he said there is no question of your disease, it is anesthetic leprosy. His hands became contracted, the nerve trunks thickened and about eight years before his death he developed small nodules on the cornea, had panophthalmitis and lost both eyes, leprous keratitis. Nobody really knew about his case except Brown-Séquard, Drs. Hutchinson, Buller, Howard and myself; his case was kept very quiet." ([9])

In Osler's textbook ([6]) leprosy is simply classified into two clinical forms: *anesthetic*

leprosy described above and corresponding to the tuberculoid leprosy of today, and lepromatous leprosy then called, confusingly for modern readers, *tubercular leprosy* because of the gross nodules or tubercles that develop in the skin. His second leprosy patient had this latter form of the disease. When walking through the dispensary of the Johns Hopkins Hospital with his satellites one morning in 1897, he saw a woman sitting on a bench and made a dramatic "spot" diagnosis of leprosy ([1]). Earlier the case had been diagnosed by one of his colleagues as cutaneous syphilis and by another as tuberculosis ([1]). This patient was the subject of his last two papers on leprosy ([9, 10]); but not before a nurse who had refused to attend to her had been discharged ([1]).

This patient was 29 years old at diagnosis. Although generally resident in Baltimore, she had spent some months at the age of 16 with an uncle "in Demerara in the West Indies, a colony much afflicted with the disease." ([10]) Osler describes her condition as follows: "She looks a great deal older than her age; the swollen appearance of the eyebrows and cheeks, the rounded outlines of the nose and of the ears, the absence of eyelashes, and the brownish pigmented discoloration, give a picture that is perfectly characteristic . . . . The hands, feet and legs are very much involved, the hands showing scars of erosion and ulceration . . . . On the upper arm . . . the skin looks raised and infiltrated, and on palpation one can feel that beneath the skin there is a nodular infiltration. The forehead shows a uniform infiltration." ([10]) "The germs are abundant in this form and have been found even in the urine in this case, and they occur in the secretion from all the sores. In the anesthetic form there is little or no risk; the germs are entirely in the nerves." ([9])

Regarding these germs, the first edition of his textbook states that "Hansen, of Bergen, first discovered this organism . . . . It has been cultivated successfully, but inoculation experiments on animals have been negative." ([5]) In the seventh edition this has been modified to "It is cultivated with extreme difficulty, and, in fact, there is some doubt as to whether it is capable of growth on artificial media." ([6]) The echoes are still heard. And what about "Calmette's antivenene, 20 to 30 c.c., subcutaneously, has been followed by remarkable results in a few cases?" ([6])

Finally, regarding this last patient a typical Oslerian touch, expressing a sentiment with which all who have cared for these patients will concur. "I may add that it has been to both physicians and nurses of our staff a great pleasure to be able to care for her and make her comfortable." ([10])

—Anand Date, M.B., B.S., M.D.

Professor, Department of Pathology
Christian Medical College Hospital
Vellore 632004
Tamil Nadu, India

Acknowledgments. This brief historical note was made possible by the kindness of Dr. Faith Wallis, Ph.D., History of Medicine Librarian at the Osler Library, McGill University, who identified and generously supplied photocopies of Osler's writings on leprosy; and the inspiration of the late Dr. P. Kutumbiah, M.D., F.R.C.P., Emeritus Professor of Medicine, Christian Medical College, Vellore; and of that company of great teacher-physicians who imparted a knowledge of the art and science of medicine together with a love for its history and heroes.

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