OSLER'S ORIGINAL AUTOPSY BOOKS

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ONE of the best documented figures in medicine, William Osler, raised his own literary monument, and it was further adorned by the personal tributes so freely outpoured in his memory; then, all received the final floodlighting of Cushing's biography.[1] As it happens, the literature is extremely distracting for my object. The more of it one reads, the longer one postpones the achievement of that "flighty purpose" which Osler was so eminently able to overtake.

From the mass of literary scaffolding which has been discarded in producing Osler's memorials, I have chosen the manuscript books containing Osler's early autopsy descriptions. Apparently, there were five, but only two have been preserved.[2] Osler used all these books when he was writing his textbook in Baltimore, but when the missing ones went astray is not known.

Of all the specimens of his own handwriting, few more vividly and directly remind one of Osler than do these notes. They tell of his intense absorption in the aspect of medicine which, in his earlier years, certainly fascinated him beyond all others. As Thomas McCrae said: "Of the various ways of approach to clinical medicine there is no doubt as to the one by which William Osler travelled." [3]

The two books contain entries from May 4, 1877 to March 14, 1879, and from March 14, 1879 to Sept. 12, 1880. Many descriptions are written in his own hand [4]; others, done by students from his dictation, often bear his corrections. Probably some were written up from notes. The books are in remarkably clean condition, considering the handling they must have had and the primitive conditions under which they were

1. Cushing, H.: Life of Sir William Osler, Oxford, Clarendon Press, 1926.

2. These have been given to the Osler Library, Montreal, by the Montreal General Hospital.

3. Sir William Osler Memorial Number, Bulletin 9, International Association of Medical Museums, Toronto, Murray Printing Co., Limited, 1926, p. 37.

4. Osler's writing was usually small and neat, but he often scribbled. Dr. W. W. Francis tells of an instance in which Osler wrote to a friend, asking to be informed on some point on "chancre," and adding that "Bill Francis" was much interested in this. It was many years later that it was discovered that the word was "Chaucer"!

produced. The autopsy room at the Montreal General Hospital was then little more than an outhouse, with a wooden table and a stove which was lighted only as required, and was not very effective even then. One of Osler's students, George E. Armstrong,[5] has told of lighting the stove on many occasions and warming a bucket of water for the work.

At the time that the first of these books was produced, Osler had no regular appointment on the staff of the hospital. He did the post-mortem work because he liked it, and when he was appointed full physician in 1878 (he was only 29 and spoke of his appointment as a "scandalous" elevation over the heads of his seniors), he went on with it, and the other men on the staff were only too glad to let him do most of their autopsies. Frequently, in the notes, he speaks of a case as "Bell's" or "Roddick's."

It is hard to better the terse, graphic writing. Many of the notes are in print in the first volume of the "Montreal General Hospital Reports" and in scattered reports in the journals of the day. It is notable that the original descriptions, as dictated by Osler, needed hardly any editing for the printed version. Here is a typical general description:

> Body that of a much emaciated, delicately built girl. Hair lanky. Skin rough and dry. Fingers slightly clubbed and nails a little incurvated. Bed sores on sacrum. Left foot and ankle swollen and oedematous; right slightly so. Chest narrow. Ecchymoses—small and punctiform—in the region of the ensiform cartilage and scattered over the skin of the abdomen.

While the cases were of great variety, two conditions predominated, since they contributed most to the mortality in the hospital at the time: pulmonary tuberculosis and typhoid. It is unlikely that Osler took any special precautions against infection at autopsy, except of course after pricking or cutting himself, and yet, even after repeated handling of extremely infectious material without gloves and with very crude water facilities, he escaped serious infection. He did, however, acquire tuberculosis of the skin, in the form of "anatomical tubercles," as they were called. He had eight or ten of these during fifteen years but did little more than watch them, recording that one took seven months to disappear.

One has to remind oneself, in reading over the descriptions of cases of phthisis, that Osler was then as much in the dark about the tubercle bacillus as was Hippocrates. One of his earliest descriptions is that of a Negro who died with a typical history (as it is now recognized) of acute pneumonic phthisis: fever, cough, weakness, emaciation and a family history of tuberculosis. Signs of cavitation were detected clini-

5. Armstrong, G. E., cited in Sir William Osler Memorial Number,[3] p. 176.

cally at the apex of the left lung, with evidence of consolidation at the bases. Cavities were present at both apexes. Osler's comment was:

> This case is one which presents several points of great interest. . . . Is it a sequence of pneumonia, or is the process tuberculous? The entire illness lasted somewhat over two months, and began after a wetting, but not with the symptoms of ordinary pneumonia. When he entered the hospital there was consolidation, with signs of breaking at the apex. The history is defective, and if the primary attack was pneumonic, it must have been subacute. A sister died of phthisis, so that a family predisposition to tuberculosis may be presumed.
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> I have never seen such an extensive area of cheesy degeneration as presented by the (left) lower lobe; uniform, solid, anaemic and dry; no trace of normal lung tissue (except narrow rim at border) and no nodules. In the upper lobe the walls of the cavity are formed by breaking down cheesy substance. The microscopical examination shows the air cells occupied with a granular debris, mixed with cells in various stages of degeneration.
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> The whole appearance is what might be supposed to proceed from an unresolved pneumonia, which had gone on to caseation, and in the upper lobe to extensive softening.

In all the early autopsies, he went into the minutest detail in describing various tuberculous cavities. He also paid great attention to the presence of adhesions in the pleural cavities, frequently underlining a note on them. In one report, after describing multitudes of cavities in both lungs, and caseous masses, he added, "There do not appear to be any *miliary* tubercles in the lungs."

But whatever his accounts may have lacked on account of bacteriologic gaps, his anatomic descriptions were so good that he was to use them unchanged many years later.

In typhoid he was on surer ground, though still without bacteriologic light. Here, too, he must have run great risks of infection, though evidently without ever acquiring the disease.

The very condition of the body at the time of autopsy must often have added to the work. There were no iceboxes then (once a body was noted as being "frozen"—this in December 1877), and sometimes there was a long interval between death and the postmortem examination. In a case of phthisis the autopsy was done eighty hours after death, and Osler made the note: "Intestines and other organs of a greenish colour and smell powerfully." He then crossed out the word "powerfully," but the description was still carefully detailed.

His notes on the external aspect of the body were always thorough; now and then they tell us something of the treatment of the day. In a case of erysipelas, for instance, he wrote: "Body that of an elderly, corpulent man. Hair scaly, grey. . . . Left leg much swollen, oedematous, and covered over with flour, put on for the erysipelas"; in another case, "On the thorax, the cicatrix of an old croton oil rash"; and, again, "The whole of the left half of the chest behind is raw from the appli-

cation of a plaster." He added odd details: A patient with pneumonia "had been a prostitute"; a man with tuberculosis had the "letter D tatooed [sic] on left mammary region—old deserter from the A. army"; "lacteal vessels of the mesentery beautifully injected" (in a case of burns).

His similes were good. He speaks of kidneys being "firm and cutting like a piece of turnip." He liked to be exact: "Two supernumerary spleens, one kidney-shaped, the size of a plum, the other, round, the size of a cherry"; again, "tricuspid orifice is small compared with the size of the right heart. It admits three fingers to middle of 2nd joint (scarcely)"; and, "the arch of the aorta admits the little finger of my right hand as far as root of nail."

He could not always obtain the organs: "The chambers of the heart were dilated, and the walls hypertrophied (measurements not taken as the organ could not be taken away)." In a case of apoplexy, after carefully describing the brain and a large hemorrhage in the pons, he wrote:

> It was found impossible to trace any vessel specially diseased in the vicinity of the clot, nor on careful inspection could any aneurisms, miliary or otherwise, be seen. Nothing could be "filched," so that a more thorough examination could not be made.

Organs were often weighed, but not always. Sometimes he had not time to finish the autopsy, and once he wrote:

> A very hurried examination made, without discovering anything except probably commencing cirrhosis of the liver, a portion of which was reserved for microscopical examination.

One sheet of notes merely reads: "Body well nourished. On removing cerebral dur. . . ."

An occasional autopsy record has pinned to it a hospital slip, which now and then has a special note from the admitting officer (at that time Dr. James Bell), asking Osler to hurry things up. One note reads:

> Please come early. Body must be removed by 4 o'clock train and I want to put everything in order before friends arrive or there will be the d—— to pay.

On another slip Dr. Bell wrote:

> I have secured autopsy with much trouble and have pledged myself that they can have the body at 3 p.m. tomorrow without any visible sign of operation.

A few of his terms are no longer used. He spoke of the kidney capsule "detaching" easily. Other examples are: "the lower lobe in a condition of low pneumonia" and "apex occupied by large anfractuous cavity." He seemed to like this term, using it twice in successive autopsies; perhaps he was reading Boswell at the time! He wrote also of "patches of attrition" over the walls of the heart.

A variety of clerks wrote from his dictation, but the initials of only one of them appear, "R. L. McD." (Dick McDonnell, who was a great favorite with Osler). Now and then the student's spelling became something notable, even for those days of careless spelling. One wonders whether Osler was a little indistinct in dictating: "Malpighian" was spelled "malpoghian" by one student and "Malpidgeon" by another. But Osler could not be blamed for the following specimen:

In the thorax the lungs do not colapse. A large patch of atrition ova anterior surface of right ventrical. . . . Left auricle also contains groumous clots. . . . In the right ventrical the columi carni are greatly developed, especially on the ceptum. . . . Artic valve presents large vegitations. . . . In left apex there is a purpel spot. . . . A considerable number of small miliary tubicles are scatered through this. . . . Only a few miliary tuburcles are noticed.

Osler would often correct or add to the actual phrases, but he left the spelling alone. His own was not above reproach now and then: "latterally" and "peice" occur in his own handwriting.

As might have been expected, the autopsy room intruded into Osler's dreams. He left a record of a number of his dreams; Dr. W. W. Francis [6] tells of one, in which Osler was watching his own autopsy being performed at Oxford, in the presence of Dr. William H. Welch, of Baltimore, and Sir Clifford Allbutt:

The pathologist, on opening Osler's heart, said "Yes, ăngina pectoris," and Osler remarked, "That's right, X; whenever Welch or Allbutt is present I always say ăngina." It was only when his intestines were all out and being cut up that Osler realised that he was permanently dead, and the shock woke him!

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6. Francis, W. W., cited by Segall, H. N.: First Clinico-Pathological Case History of Angina Pectoris, Bull. Hist. Med. **18**:102, 1945.