Osler’s unusual case — Was it Churg–Strauss syndrome?

Peter Warren, MB

Ninety-nine years ago, on Oct. 15, 1900, William Osler presented a case to a meeting of the Johns Hopkins Hospital Medical Society. I will present the case in Osler’s words and then show that it has the features of what we now call Churg–Strauss syndrome. Osler’s report began with the following paragraphs.

This is an unusual case in several respects. This young man came in on the 3d of October complaining of pain in the abdomen. His personal and family history are negative so far as this present condition is concerned. He had eaten abundantly of pork, and it is not known whether it was raw or cooked, as he is a Pole, and it is difficult to understand him.

His present illness began with a chill, accompanied by pain in the abdomen, and on the three following days he had nausea and vomiting. There was no diarrhea. There had been cough and expectoration since the onset of the illness and he had been confined to bed.

On October 7, in addition to the cyanosis, petechiae appeared over the body, first on the face and chest and then over the skin of the entire body except the legs. He presented a unique appearance, so far as our experience here is concerned, and looked very much like a case of malignant hemorrhagic smallpox. A differential count showed 11 per cent of eosinophiles. On the 8th of October he showed great tenderness of the muscles. The slightest touch on the muscles of the arms or legs caused him to wince. A portion of muscle was excised and showed marked degeneration with a great deal of fat in the fibres, but no trichinae. On the 9th his leucocytosis rose to 52,000, the petechiae had increased, his face was swollen, and he looked to be in a very critical condition. He was, however, rational, apparently comfortable and took his food fairly well. On the 11th the eosinophiles had risen to 25 per cent. Yesterday the cyanosis began to disappear. Cultures from the blood are negative and there is no Widal reaction. There is a trace of albumin and few granular casts.

No more clinical information is given. Osler went on to review the causes of cyanosis in general. In discussion, Dr. William Welch, newly elected president of the society, asked if there were any abnormal leukocytes, to which Dr. Futcher replied No, but that there were cells that were hard to classify as eosinophils or polymorphonuclear leukocytes. Welch then reminded the society that the case was similar to black smallpox, in which it had been claimed that the leukocytic count is characteristic. No more was said, and the case was reported under the heading “Case of asthma with cyanosis, extensive purpura, painful muscles, and eosinophilia.”

What could this young man have had? At first sight, trichinosis seems likely, and certainly, as indicated by the opening paragraph of the case, Osler suspected it. Usually occurring after the ingestion of contaminated pork, trichinosis is caused by the nematode Trichinella spiralis. The larvae of the parasite migrate from the gut to the muscles and, to a lesser degree, to other tissues, including the lungs and the brain. Purpura and petechiae are rare. Osler was an acknowledged expert on trichinosis. He had been interested in the epizoa since his student days. In 1869, while still in Toronto, he had even studied their infiltration of the muscles as part of a routine dissection in anatomy. He published on trichinosis as early as 1876 and engaged in an exhaustive study of the parasites of the Montreal pork supply in 1883. In 1896 T.R. Brown, one of Osler’s pupils, discovered the eosinophilia of trichinosis. In 1899 Osler reviewed his personal experience with trichinosis, and the method for muscle biopsy, in the American Journal of the Medical Sciences. Therefore, if Osler
I conclude that it is highly plausible that Osler's unusual case was one of Churg–Strauss syndrome. Osler's case report is an example of the scholarly contribution of a clinician who practises at the bedside and records carefully the observations made in this natural laboratory. Although Osler may have seen it first, he would have been the last to claim the syndrome to his name — he believed that those who fully describe a disease should get the credit. Churg–Strauss syndrome is a fitting eponym, for the studies of Churg and Strauss defined the disorder.

I gratefully acknowledge the help of Ms. L. Szczygiel, Osler Library of the History of Medicine, McGill University, Montreal, and the staff of the N.J. MacLean Health Sciences Library, University of Manitoba, Winnipeg.

References


Reprint requests to: Dr. Peter Warren, Director, History of Medicine Program, University of Manitoba, RS115 HSC, 810 Sherbrook St., Winnipeg MB R3A 1R8; fax 204 787-2420; warrencp@ms.umanitoba.ca