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Short Communication

Historical Appreciation of the Johns Hopkins Hospital Medical Society's Meeting on Melanoma Metastases

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In 1889, the famous German Pathologist, Julius Cohnheim, postulated that the findings from tumor autopsy are explicable on natural principles. Within the next decade, members of the Johns Hopkins Hospital Medical Society with Dr. Flexner in the Chair dealt with a case that demonstrated the above dictum of Cohnheim. It is proposed here to appreciate historically what happened at the Meeting of February 3, 1896. It covers the early knowledge of metastatic melanoma.

Keywords Cohnheim, cancer, melanoma, history, natural pathways

In 1889, the famous German pathologist, Julius Cohnheim postulated important principles gained from tumor autopsy, namely, that they "are all in a manner experiments instituted by nature, which we need only rightly interpret to get a clear idea of the causes, laws of growth, and significance of the tumor" (1). In this context, the panorama must be the best with the melanoma which, by definition, forms pigment characteristically (2).

Historical text

During the meeting of February 3, 1896, with the famous Dr. Flexner in the Chair, the Medical Society of the Johns Hopkins Hospital discussed generalized melanoma (3) which may be excerpted as follows:

i) **Dr. Bloodgood**, A 70-year-old woman had a pigmented pedunculated wart in the right axilla for a great many years. The growth was removed under cocaine. In 2 months, she was back with enlarged nodes in the right axilla and three darkly pigmented bodies on the skin near the scar. The nodes were excised and were proved to be metastatic melanoma. Within 2 weeks, the supraclavicular nodes proved to be metastatic. So were others all over the body, this being the second of such sudden appearance in their experience.

ii) **Dr. Blumer.** The autopsy showed a solid mass of new growth extending to and involving the right breast. The surface of the body, particularly of the chest and abdomen, were covered with small nodules of various sizes. There were but few in the skin over the back and the extremities. The abdominal muscles and those of the back contained metastases.

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So were those found in both layers of the peritoneum including the dependent parts, especially in the pelvic, over the bladder and around the appendix. Transplantation was suspected. The parietal layer of the pericardium was free as was the heart muscle itself. The visceral layer of the pericardium showed two or three metastases. Both the surface and the substance of the lungs suffered. The liver contained a single metastasis "which was only found after prolonged search". Both adrenals were invaded as in the kidney and spleen. No growths were found in the urinary bladder and uterus, while the right ovary had a small nodule. The intestines were involved as was the pancreas and right thyroid lobe. Bones were involved as to some ribs and pericranium. The dura was entirely free but the pia-arachnoid suffered. The brain contained a considerable number of metastases including the right crus of the cerebrum and right lobe of the cerebellum.

Discussion

Perhaps, this is best reproduced. Thus, there are several points of interest in this case. In the first place the distribution of the metastases was of interest. The places in which metastases are rare and in which they occurred in this case are in the genital organs (right ovary), in the pancreas and in the thyroid gland. A most curious clinical feature is that notwithstanding the extensive involvement of the brain there were absolutely no signs of brain involvement during life. An interesting feature of this class of tumors concerns the melanin which causes the coloration of the tumors, and the origin of this melanin. It seems probable, however, that the pigment in these cases comes from some secretory activity of the cells themselves.

Has the injunction of Cohnheim been followed? Yes! This is especially with regard to the early stages in which there is the origin in a right axillary wart with quick succession to the lymph nodes. There is also the element of transplantation in the peritoneal cavity. These snapshots anticipate the recent progress in our understanding of the pathology of melanoma (4).

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