

The Spread of Melanoma to Bone: Historical Perspectives

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Abstract

It is axiomatic that present “truths” have historical perspectives. Consider melanoma. It is distinguished by its possession of pigment characteristically. The word came into existence in 1838. A decade later, the Pathological Society of London started to publish its Transactions. Therefore, what is of interest concerning this cancer? Moreover, a famous German Pathologist, Julius Cohnheim, confided that necropsies provide answers to questions regarding metastasis. Consequently, this paper reports on the spread of melanoma to the bones from 1848 to the end of that century. It is concluded with the impressive thoughts of one of the quoted old masters!

Keywords: Cancer; Melanoma; Spread; Bone; History

Introduction

It is axiomatic, as Moser [1] stressed, that medical “truths” have historical perspectives. Therefore, consider “melanoma.” This cancer is characterized as being pigmented and as having crept into the English language in 1838 [2]. Now, since [1] pathologists started to publish the Transactions of the Pathological Society of London in 1846-48, [3] and [2] a famous German pathologist, Julius Cohnheim [4], considered that Nature shows her footsteps when necropsies are carried out, what has transpired between 1848 and the end of that century? This paper answers this question with a series of recorded cases.

Historical texts

Rickman Godlee [5] stood out with a confession. As he put it, “I must express my regret that the spinal cord was not looked at, and that none of the bones were sawn through.” Likewise, Payne [6] was pained that, though the tumors were “deeply pigmented, some very black,” the only internal organs found were the liver and the lungs [6].

Battle [7] remarked that the secondary deposits were “universal” and included bones. On his part, Beadles [8] was brief. The vertex of the skull exhibited, he noted, “a commencing growth.”

Between the scalp and the brain convolution, as Ogle [9] observed, there was intervening bone involvement, although both structures were unscathed. However, in the experience of Targett [10] both the base of the skull and the dura mater succumbed.

Rolleston [11] had a wider experience. Thus, there were deposits in the third and fourth left ribs. In particular he noted the following links: He had left hemiplegia from the pressure of a growth which, starting in the right parietal bone, had penetrated the skull, depressed the dura mater and surface of the cortex, and at one point had penetrated the dura mater, and formed a polypoid tumour which was embedded in the substance of the right cerebral hemisphere.

Sanderson [12] saw, on both sides of the vertebral column, its associated group of growths thus: a number of tumors, varying in size from that of a pin’s head to that of a large walnut. These were most abundant on the left side, where they formed a chain connecting the spleen with the kidney and extending from the latter into the pelvic cavity.

In the experience of Legg [13] the connection was between “the ribs, near the vertebrae.” Turning to Fagge [14] he presented two cases in one of which the combination of deposits was “in the dipole of the calvaria and sternum.” Calvert and Pigg [15]

observed the colonization of numerous sites including the lumbar vertebrae.

Discussion

It is noteworthy that the weighty tome of Willis [15] considered miscellaneous secondary tumors of bone but, under melanoma, gave only references which appeared in 1907, 1912, 1922, and 1928. In my contribution to the American Book on "Bone Metastasis" [16] mine was the Introductory Chapter. Interestingly, in the references in it demonstrated, I included some above cited works of Godlee [5], Rolleston [11], and Legg [13]. Here, it is apposite to draw attention to the very ordered reasoning concerning the entire metastasis phenomenon. This was expatiated on by the first of them as follows:

Conclusion

In conclusion, I would say that these pigmented tumours, when they fall in our way, are worthy of very careful observation. We are able to detect the first appearance of a new growth in any part, and it is evidently these very minute ones which afford the best opportunity of studying the method of development of this particular disease, and probably of throwing light on the origin and progress of sarcomata in general.

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