Short Communication Open Access

# The Historical Elements of Cancer Permeation in Melanoma

#### Wilson IB Onuigbo\*

Department of Pathology, Medical Foundation and Clinic, 8 Nsukka Lane, Enugu 400001, Nigeria

\*Corresponding author: Wilson IB Onuigbo, Department of Pathology, Medical Foundation and Clinic, 8 Nsukka Lane, Enugu 400001, Nigeria, E-mail: wilson.onuigbo@gmail.com

Received Date: Oct 24, 2016, Accepted Date: Jan 17, 2017, Published Date: Jan 24, 2017

Copyright: © 2017 Onuigbo WIB. This is an open-access article distributed under the terms of the Creative Commons Attribution License, which permits unrestricted use, distribution, and reproduction in any medium, provided the original author and source are credited.

#### Abstract

In 1889, Julius Cohnheim argued that autopsies aid in tracing the footsteps of Nature. Before then, a Pathological Society had been formed in London, its Transactions being published from 1846-1848 period. As melanoma is characteristically pigmented, The Transactions were searched for evidence of lymphatic permeation. The positive results were in keeping with the personal similar series written on the pancreas, bone and kidney.

Keywords: Cancer; Melanoma; Permeation; History

### Introduction

The great German Pathologist, Julius Cohnheim, [1] asserted that the autopsy is capable of delineating the footsteps of Nature. I am persuaded, therefore, that the characteristic pigmentation of melanoma must facilitate the perception of metastatic patterns in The Transactions of the Pathological Society of London from its starting period of 1846-1848 [2]. Hence, it is fitting to comb them as regards lymphatic permeation, seeing that I had reviewed this subject in 1973 [3]. Moreover, as that review was limited largely to current concepts, it is imperative to go further back. For example, Macfarlane Burnet [4] insisted on always knowing the past when starting to do research. Accordingly, this paper supplies some chronologically arranged historical data concerning the rudiments of lymphatic permeation in melanomas.

## Historical texts

Ogle [5] appreciated that melanoma deposits seemed chiefly to follow the course of the larger blood vessels and lymphatics.

Godlee [6] was picturesque:

On making sections subsequently of the less distinctly black glands by the side of the external iliac artery it was found that these cells (which varied considerably in size and shape) were the only ones containing pigment, and were arranged in definite rows along the lines of the fibrous trabeculæ, occupying, in fact, the position of what is known as the lymph-channel or lymph-sinus.

White [7] painted the picture of the variably colored materials in that "in many places there were wavy absolutely black hues, giving the whole a foliaceous appearance." Indeed, he was particularly interested in the lymphatics taking up the pigment.

Target [8] noted microscopically that "the tumour was thickly permeated with capillary vessels." The specimen was so precious that, it "has been in Guy's Hospital Museum since 1859."

Battle [9] illustrated with melanoma of the clitoris from a patient aged 79 years. When the lesion was sectioned, the revelation was as follows:

In the subcutaneous tissue over the pubes the section shows a series of circular pigmented patches varying in size from a crow quill to a cedar pencil; these are the infiltrated lymphatic vessels, full of pigmented growth. As a rule the section of these is quite clearly defined, circular, and isolated; but in one or two places there is a blackish discolouration, and near the base of the clitoris on the upper aspect the pigmented growth extends between the upper part of the clitoris and the largest lymphatic.

## Discussion

A most remarkable feature of the Transactions of the Pathological Society of London was the establishment of the "Morbid Growths Committee". Remarkably, this group of pathologists helped members on microscopical interpretations and solutions. However, on account of the impeccable status of pigmentation, their help was not needed in this paper on lymphatic permeation.

Incidentally, their usual opinions were also not encountered in my series which has so far included the pancreas, [10] bone [11] and kidney [12]. I am persuaded that this work is in keeping with Cohnheim's creed as well as with the visionary views of other medical masters [13]. It is also in keeping with the beginnings of the surgical pathology of cancer [14].

Therefore, it was surprising to find that Einhon's group did not comment on lymphatic permeation in their 1974 wide ranging review of the metastatic patterns of choroidal melanoma [15].

## References

- Cohnheim J (1889) Lectures on general pathology. Section 1. London. The New Sydenham Society 14.
- (1846) Anonymous. BYE-LAWS AND REGULATIONS. Trans Path Soc Lond 48: 1: 15.
- Onuigbo WIB (1973) Cancer permeation: Processes, problems and prospects – a review. Cancer Res 33: 633-636.
- 4. Burnet FM (1977) Morphogenesis in cancer. Med J Aust 1: 5-9.
- Ogle JW (1856) Melanotic carcinomatous deposit connected with the dura mater, the lining of the ventricles, and the seventh and ninth pairs of cranial nerves. Trans Path Soc Lond 7: 5-8.

- Godlee RJ (1874) Melanotic sarcoma in the medulla oblongata secondary 6. to a similar growth situated probably in a lymphatic gland. Trans Path Soc Lond 25: 18-23.
- White H (1886) A case of primary melanotic carcinoma of the liver. Trans 7. Path Soc Lond 37: 272-275.
- Target JH (1891) Secondary melanotic sarcoma of the bladder. Trans Path Soc Lond 42: 214-215.
- Battle H (1895) Primary melanotic sarcoma of clitoris. Trans Path Soc Lond 46: 189.
- Onuigbo WIB (2016) A brief history of the spread of melanoma to the pancreas. Pancreatic Disorders & Therapy 6: 2.
- Onuigbo WIB (2016) The spread of melanoma to bone: Historical 11. perspectives. Orthopedics and Rheumatol Open Access J 2: 001-002.
- Onuigbo WIB (2016) Metastasis of melanoma to the kidney: Historical 12. notes. J Cancer Epidemiol Treat 1: 17-18.
- 13. Onuigbo WIB (2015) The visionary views of medical masters of yester years on Nature's norms point to present prospects in the target therapy of cancer. Biol Med 7:221.
- 14. Onuigbo WIB (2015) The surgical pathology of cancer: A historical review. J Cancer Prev Curr Res 2: 00039.
- Einhorn LH, Burges MA, Gottlieb JA (1974) Metastatic patterns of choroidal melanoma. Cancer 34: 1001-1004.