

connective tissue, the resistance of which forces it outward again, causing it to form a tumour-like projection on the skin. Cancer is also a rapidly regenerating, down-growing epithelial tumour; therefore the facts that *Molluscum contagiosum* is an epithelial tumour growing downward, and formed of rapidly proliferating epithelial cells, which quickly degenerate, are all suggestive of and analogous to cancer. Furthermore, a great number of facts have been collected going to show that *Molluscum contagiosum* is, as its name suggests, a parasitic disease,<sup>(1)</sup> as some observers suppose cancer to be. Now, if *Molluscum contagiosum* is contagious and comparatively simple, because of its simplicity the contagium ought to be all the more easily got at. Long ago there were noticed in this disease peculiar little clear bodies which form in the epithelial cells, and which grow larger and larger, finally coalescing and filling the entire cell, shoving the nucleus away out to one side. These are called molluscum bodies. Neisser supposed them to be coccidia, or psorosperms, a class of monocellular organisms belonging to the sporozoa.<sup>(2)</sup> From the fact that coccidia do cause a disease of the bile ducts and intestines of rabbits called "wet snout,"<sup>(3)</sup> which form large tumours very much like some forms of cancer of these regions, it was thought the cause of cancer was at last in a fair way to being discovered, and also its connection with several other diseases characterized

by epithelial proliferation; for within a short time Paget's disease of the nipple, which is a superficial cancer, and *Psorospermo folliculaire végétante*, a disease characterized by the formation of large, horny, epithelial masses at the openings of the fat glands of the skin, were also attributed to coccidia. "We apparently had a well-defined class of diseases caused by psorosperms, and therefore called psorospermoses, consisting of (1) *Molluscum contagiosum*, (2) Paget's disease of the nipple, and (3) *Psorospermo folliculaire végétante*; but Neisser, on further investigation, has been inclined to doubt the presence of coccidia even in *Molluscum contagiosum*, and to deny all proof of their existence in either of the other two diseases,<sup>(4)</sup> and the majority of observers have been inclined to go with him.<sup>(5)</sup> So this fine structure, from which so much was expected, is in a fair way of being tumbled down again; but although it has not been proven that cancer is contagious, or that it is due to a parasite, yet many details have been added to our knowledge of the diseases under investigation, and the study of the coccidia is being pushed with a vigour never before brought to bear upon them. As coccidia undoubtedly do cause diseases in the lower animals, we cannot foresee what a far-

(1) In 1889 Darier and Thibault (*La Semaine Médicale*, 1889, page 101, quoted by J. Warren Collins in his article, "The Parasitic Origin of Cancer," *Boston Medical Journal*, Vol. 122, No. 3), discovered what they supposed to be a psorosperm in the affection called *Psorospermo folliculaire végétante*, and in 1899 Darier and Louis Wickham (*Maladie de Paget*, Paris, 1899) found constantly, and in numbers corresponding to the intensity of the disease process, bodies which they supposed to be psorosperms in the "disease of the mammary areola preceding cancer of the mammary gland, now called Paget's disease."

(2) Neisser: "Ueber den gegenwärtigen Stand der Psorospermosenlehre," *Verhandlungen der Deutschen Dermatologischen Gesellschaft*. Dritter Congress, September, 1891 (*Ergänzungshefte zum Archiv für Dermatologie und Syphilis*).

(3) For instance, Karg. See *Festschrift, Herrn Prof. Dr. C. Thiersch (Deutschen Zeitschrift für Chirurgie, band. 34, s. 133)*. "Ueber das Carcinom," von Dr. med. C. Karg. McCallum, also, as the result of a very carefully worked-out series of investigations, is of the opinion the molluscum bodies are not parasites, but are extended or migrated plasmosomata—the term plasmosoma being used to designate an eosinophilous nucleolus. "The Histology of Molluscum Contagiosum," by A. B. McCallum, M.B., Ph.D. (*Journal of Cutaneous and Genito-Urinary Diseases*, March, 1892).

(1) Professor Pick has reported ("Verhandlungen der Deutschen Dermatologischen Gesellschaft, Ergänzungshefte zum Archiv für Dermatologie und Syphilis," April 15, 1892, p. 91) a family having *Molluscum contagiosum*, from one member of which he inoculated a child. After ten weeks a molluscum tumour appeared on the site of inoculation. Also many outbreaks of this affection have been observed in families, and in hospitals for children; for instance, that reported by Graham (*Molluscum contagiosum*, by J. E. Graham, M.D., *Journal of Cutaneous and Genito-Urinary Diseases*, March, 1892).

(2) "Ueber das Epithelioma (sive Molluscum) Contagiosum," von Professor A. Neisser. *Vierteljahresschrift für Dermatologie und Syphilis*, 1888, s. 553.

(3) For a good account of this disease, and the possible light it may throw on the relationship of coccidia to cancer, see "The Parasitism of Protozoa in Carcinoma," being the Morton Lecture on "Cancer and Cancerous Diseases," by James Galloway, A.M., M.D. (Aber.), (*British Medical Journal*, February 4, 1893).