

were due to a hyperplasia of the cells of the rete malpighii at the mouths of the hair follicles.

Sangster,¹ in 1888, advanced views in support of the above, and gradually it has become recognized that the seat of origin of molluscum warts is in the rete. The last, as far as I am aware, who has strongly supported these views has been Dr. A. B. Macallum² in his article on "The Histology of Molluscum Contagiosum." He says: "Whether the molluscum growths do originate in hair follicles or in sebaceous glands cannot be determined from my preparations. In all these the stratum mucosum of the epidermis is the part which has given origin to the growth." Figures demonstrate these facts. Further on he remarks: "In yet later stages the corneous material may form a column and simulate a hair shaft, or, when it has fallen out of the preparation, the epithelial down-growth with its central cavity may resemble a gland duct. Such stages have doubtless been seen by others, and they may have given rise to the conclusion that the molluscum growth originates in the hair follicles or in the sebaceous glands." On this portion of the pathology I think I can finally say that the belief is now generally held that the disease arises from the rete malpighii.

Whether the disease is contagious or not has also been one of the disputed characteristics of this affection. The majority of English and American authorities claim that it has this peculiarity; while, on the other hand, those of the continent hold generally the opposite view. It appears to me that the clinical data of each year confirm the contagious nature of the disease, and reference to text-books on diseases of the skin and of cases cited in the various journals serve only to strengthen this idea. It is only necessary to refer to a series of cases which have occurred in the Infants' Home to demonstrate its contagiousness. Dr. J. E. Graham³ has given a full account of it in *The Journal of Cutaneous and Genito-Urinary Diseases*, from which I shall take the liberty of quoting some sentences:

"In June, 1888, a child was brought into the Home who was noticed to have small warty growths on the face and neck. Remained for

three months in the infirmary. She, with several others, was then sent to one of the large nurseries, which accommodates about twenty children and which is generally fully occupied . . .

Five months after this patient had entered the Home, and two months after she was brought into the nursery, four inmates of the latter were found to be affected." "From that time until the present the disease has existed in that nursery." "Fifteen children in all have been affected, 10 males and 5 females."

Another point which has, perhaps, excited the most controversy has been with regard to the "molluscum bodies." They were first considered to be parasitic in nature, and were thought to be the *contagium vivum* of the affection; one authority in St. Louis describing them as cryptogamic spores. In 1875, C. Boeck showed that molluscum bodies were the degenerative changes (affecting nucleus first) in cells identical with the cells of the rete, the change being neither fatty nor amyloid. In the same year Lubowski demonstrated the epidermal nature of the disease, and believed the molluscum bodies were the results of degenerative changes in the wandering cells of the rete.

Still later Neisser⁴ has expressed his views to the effect that, in his mind, these are coccidia. He has not, as yet, been able to cultivate them, nor has he succeeded in producing the disease by inoculation. At present no definite expression of opinion as to the nature of these bodies can be formulated.

Dr. Macallum, referring again to his article, comes to the conclusion that they are altered plasmosomata, and the whole process is one of "hyperchromatosis."

I took up these investigations in March, 1891, with a view to find, if possible, some organism which might explain the contagiousness of this disease. As far as I have been able to ascertain, no one, as yet, save Dr. Angelucci,⁵ of Rome, has attributed the disease to a micro-organism. His work was done some time prior to 1881, and the results were made known at the Medical Congress that year, which was held in London.

He goes on to state that he had found a

1. A. Sangster, *British Medical Journal*, 1880, p. 327.

2. Dr. A. B. Macallum, *Journal of Cutaneous and Genito-Urinary Diseases*, March, 1892, Vol. X., p. 95.

3. March, 1892, Vol. X., p. 90.

4. Jahresbericht Pathogenen Mikro-organismen, etc. Baumgarten, 1888, p. 315.

5. Transactions of the International Congress, Vol. III., 1881, p. 149. Section, Diseases of the Skin.