

Digest of Literature.

I.

DISEASES OF THE SKIN.

ANATOMY, PHYSIOLOGY AND PATHOLOGY.

A. R. ROBINSON, M.D.

1. **Adams, W.**—Obliteration of depressed cicatrices. Medical Society of London. *Lancet*, Nov. 6, 1875.
2. **Gussenbauer, C.**—On the formation of the pigment in melanotic sarcoma and simple melanoma of the skin. (*Ueber die Pigmentbildung in melanotischen Sarcomen und einfachen Melanomen der Haut.*) *Archiv. f. path. Anat. und Phys.*: Vol. LXIII.
3. **Heynold, Hans.**—Contribution to the histology and regeneration of the nail. (*Beitrag zur Histologie und Genese des Nagels.*) *Virchow's Archives*, Nov. 10, 1875.
4. **Jones, H. M., and R. Aitkins.**—Microscopical appearances in a case of congenital alopecia. *Dublin Journal Med. Sciences*, Sept., 1875.
5. **Knapp.**—On arsenic eaters. (*Ueber Arsenikesser.*) *Allg. Wien. Med. Zeitung*, Sept. 28, 1875, and Oct. 5, 1875.
6. **Lott, G.**—On the intimate structure and regeneration of epithelium. (*Ueber den feinern Bau und die physiologische Regeneration der Epithelien.*) *Rolle's Untersuchungen in der Inst. zu Grath*, 3 Heft.
7. **Lukomiski, W.**—On molluscum contagiosum. (*Ueber Molluscum Contagiosum.*) *Virchow's Archiv.*: Vol. LXV., 2 Heft.
8. **Martyn M.**—Conjoined epithelium. *Monthly Microsc. Journal*, Aug., 1875.
9. **Megnin, P.**—Note on certain anatomical details which the acarus parasite, *sarcoptes hominis* presents, and which have hitherto escaped the attention of observers. (*Note sur certains détails anatomiques qui présente l'espèce acarienne parasite, le sarcoptes hominis, et qui jusque a present avaient échappé a l'attention des observateurs.*) *La France Médicale*, Jan. 15, 1876.
10. **Megnin, J. P.**—Evidence furnished by comparative pathology of the diathetic nature of the dartses. (*Preuves fourni par la pathologie comparée de la nature diathésique des dartses.*) *La France Médicale*, Dec., 1875.

11. **Metschinkoff, E.**—The disposition of the hairs of the eyelids in the Mongolian and Caucasian races. (*Ueber die Beschaffenheit der Augenlieder bei den Mongolen and Kaukasiern.*) Zeitschr. f. Ethnologie, Vol. VII., 1874.

12. **Michaud.**—Note on the state of the nerves in perforating ulcer of the foot. (*Note sur l'état des nerfs dans l'ulcère perforant du pied.*) Lyon Médical, Jan., 1876.

13. **Richet.**—Recurrent sensibility. L'Union Médicale, Aug. 21, 1875. (The Journal of Nervous and Mental Dis., Jan., 1876).

14. **Scolosuboff, M.**—On the localisation of arsenic in the tissues from the use of arsenical waters. (*Sur la localisation de l'arsenic dans les tissus à la suite de l'usage des arseniaux.*) Archiv. de Physiologie. August and September, 1875.

15. **Stirling, W.**—On a new method of preparing the skin for histological examination. The Journal of Anatomy and Physiology, Oct., 1875.

16. **Stroganow, N.**—On a complication of elephantiasis Arabum with cancer, and on the mode of evolution of the latter. (*Ueber eine complication von Elephantiasis arabum mit krebs, und über die Entwickelungsweise des letzteren.*) Virchow's Archives, Bd LXV. I. Heft.

17. **Wolkenstein, A. V.**—Absorption by the skin. (Centralblatt, No. 26, 1875.)

18.—**Vajda.**—Contributions to the anatomy of the syphilitic papules of the genitals. (*Beiträge zur Anatomie der syphilitischen Papeln der Geschlechts.*) Theile. Med. Jahr. 1875. III Heft.

GUSSENBAUER (2) says that in the formation of pigment in pathological conditions there is always observed, first, an arrest of circulation, generally in the small vessels, sometimes in the veins and arteries of considerable size. This arrest gives rise to an extasy more or less pronounced of the vessels, especially of the capillaries, and to a complete stasis of their contents. The three phenomena, arrest of circulation, extasy of the vessels and stasis of the blood constitute the first degree of pigmentation. Then comes decoloration of the colouring matter of the red corpuscles, its dissolution in the blood plasma and diffusion through the vessels into the surrounding tissues, where it is principally absorbed by the cellular elements, always in a soluble state. Not only the cells but all tissues capable of imbibing take up the coloring matter. This imbibition does not take place only in the vessel's walls and their immediate neighborhood, though these are most deeply colored, but also in remote regions.

This decoloration of the hæmatin, dialysis of the coloring substance, dissolution in the plasma and diffusion and imbibition into the parenchymatous tissues constitute the second degree. In the third degree precipitation of the pigment in the form of granules of variable color occurs.

In the patient of JONES and ATKINS (4) the skin of the scalp was smooth and polished, the finger nails badly formed, the teeth irregular, the skin on the scalp equally sensible in all parts.



Microscopical examination showed the cuticular surface to be composed of fine fibro-areolar tissue, with numerous large loculi of adipose cells in its meshes, beneath this the fibrous element was denser, still deeper, fibres again narrow and appear as if broken across. In this were seen irregular loculi, crossed by fine trabeculae and containing granular matter. In parts of the section were seen an aggregation of apertures lined with small and compressed epidermic cells. They thought these latter represented altered follicles. Below the fibroid tissue was a layer of epidermis much atrophied. In some parts there was a faint appearance of papillae. True corium was nowhere to be seen. In all the sections examined, one or two aborted hair follicles were seen, forming shallow pits in the epidermic layer, and lined by a layer of similar cells. The open extremities of the follicles looked downwards.

LUKOMSKY (7) was not able to find out the nature of the molluscum bodies though treating them with different agents. He considers the disease to be an affection of the malphigian layer and not of the sebaceous gland. In the beginning the malphigian projections grow rapidly. The papillae contain almost exclusively blood vessels. The peripheral portions of the projections are lined with cylindrical epithelium. On these follow 2 or 3 layers of cells of the mucous layer, which show no peculiarity except their large size. In the centre of the projections appear large granular cells, which, as they advance upwards pass into molluscum bodies. In a later stage the projections grow still larger, their contents can be partly squeezed out and we have the conical tumor as present in this disease. The molluscum bodies he finds come from cells which lie in the mucous layer, but thinks they do not arise from the malphigian cells themselves but from wandering cells which are always present in this layer.

MARTYN (8) gives the name of conjoined epithelium to the cells first described by Max Schultze as *Stachel und Riffzellen*. They have hitherto been regarded as processes of cells which interlock with other cells. Martyn considers these processes are produced by the rupture of bands uniting cells together. The dark ends seen when two cells touch, he thinks an optical delusion and that the dark spot is a cavern between two bands. On the other hand when two cells are touching, he says a careful view will show that the light track can be followed from one cell to the next. Therefore, he thinks the "prickles" are, in all cases broken bands of union. The "ridges" he thinks are stretched bands broken off at one end and lying parallel on the cell wall. He describes their mode of origin as follows: "The cells of the rete mucosum in multiplying by subdivision retain numerous points of incomplete severance, and these points are dragged out and become the uniting bands. These when severed assume the form of 'prickles.'" In pathological conditions he thinks they show an abnormal formative activity of the lower cells of the rete mucosum.

METSCHINKOFF (11) shows that the condition present in epican-

thus is found as a normal condition to a slight degree, constituting an arrest of development. He thinks it is found in a rudimentary condition in the whole human race, and, therefore, is of opinion that the Mongolian race is one of the most ancient and that it has left more or less traces in all the others.

MICHAUD (12) does not agree with the generally accepted view that perforating ulcer of the foot is owing to degeneration of the nerves of this region. In a case which came under his observation the nerves of the affected limb were found to be healthy. There was neither muscular atrophy or degeneration of the nerves. He found, however, a sort of peripheral sclerosis of the terminal nerve fibres. He divides ulceration of the foot into two classes; (1) those accompanying grave affections as ataxy, paralysis, &c., and which are sometimes accompanied by a degenerative neuritis; (2) idiopathic perforating ulcer, where there is no degeneration of the nerves, but only a peripheral sclerosis of the nerve ramifications.

RICHET (13) offers the following explanation of recurrent sensibility in the hand after division of the nerves. The nerves, he finds terminate as follows: The terminal branches from the median ulnar and radial unite forming loops. From these loops smaller branches depart and end in the tactile corpuscles. On account of these anastomoses, section of one of the nerves does not produce destruction of sensibility. The sensibility of the peripheral portion of the divided nerve is retained, because a sufficient number of fibres, either from the radial or ulnar, follow the course of the anastomosis by a recurrent track. He does not think there is any immediate reunion of the nerves, with passage of nervous influence across the cicatrix.

SCOLOSUBOFF (14) finds in cases of acute poisoning the arsenic specially in the brain. In cases of chronic poisoning, the arsenic is principally found in the brain and spinal marrow, and only consequitively in the muscles and liver. In acute poisoning it invades first the brain and then passes into the spine. In chronic poisoning it is concentrated in large quantities in the brain and cord, and is found also, though in small quantities, in the liver and muscles.

STIRLING (15) prepares the skin for histological examination by digestion of the tissue. An artificial digestion fluid is made as follows: 1 cubic centimeter of pure hydrochloric acid is mixed with 500 cubic centimeters of water at 38° centigrade and 1 gramme of pepsine added. After keeping the mixture at 38° for three hours, shake it thoroughly. The piece of skin to be examined is then to be stretched and tied over the mouth of a glass dialysing jar. It is then to be digested in the above fluid at 38° from two to eighth hours, according to the size and age of the skin. When digestion is partly completed, the skin is then placed in water 24 hours. Small blood vessels and nerves can now be distinctly seen. The fibres of white fibrous tissue swell up and become clear and transparent.

In a case of elephantiasis Arabum, complicated with cancer, STROGANOW (16) found bands of true epithelium crossing the connective tissue. There was no special connection between the epithelial cells and the blood vessels. They lay directly upon the connective tissue. There was no endothelium found between the epithelial cells and the connective tissue. He thinks the cells came from the endothelium of the lymphatic vessels by direct metamorphosis. The cells of the sweat glands were normal, even when in close proximity to the epithelial bands.

WOLKENSTEIN (17) employed the skin of frogs to test permeability to different solutions. He found it permeable to watery solutions but not to concentrated ones. Increase in the temperature of the solution increased the absorptive power of the skin, the absorption being in direct relation to the temperature of the fluid. In young animals the skin absorbs better than in old animals of the same species. Hair and wool hinder the absorption. Some alkaloids (atropine, &c.,) are also absorbed.

VAJDA (18) in cases of moist syphilitic papules, found the principal changes in the malphigian layer. In the portion between the papules the nucleus was more sharply defined and the nucleolus more prominent. Often two nucleoli were present. Besides these nuclei, other nuclei were present in the cells. They resemble the nuclei of the cells, but Vajda does not think they are identical. In other parts of the preparation the nuclei and nucleoli were increased in number. The intermediate nuclei were also increased in number. Examining with stronger lens he found two kinds of nucleoli, one kind surrounded with distinct nucleus; a second group of small bodies which lie in cells but are not surrounded by a nucleus. He does not know if the nucleus in this latter case is dead and the nucleoli are the result of its division, but knows some are so derived. The blood vessels were not much changed, and there was very little cell infiltration.

INFLAMMATIONS; ACUTE AND CONTAGIOUS.

FRANK P. FOSTER, M. D.

1. Adler, H.—The ophthalmic complications and sequelæ of small-pox. (*Die während und nach der Variola auftretenden Augenkrankheiten.* [*Nachtrag.*]) Vierteljahresschrift für Dermatologie und Syphilis. 1875, p. 327.
2. Tripe, J. W.—Ages at death from three eruptive fevers. Brit. Med. Jour., Vol. 11, 1875, p. 520.
3. Letcher, B.—The antiseptic treatment of small-pox. Trans. McDowell Med. Soc., Henderson, Ky.
4. Verstraeten.—The state of the blood in small-pox. (*Note*