ON A CASE OF ENDOTHELIAL FIBRO-ANGIOMA OF THE EXTERNAL AURICULAR MEATUS.

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I think it opportune to make known to my colleagues this case, not so much on account of the position of the tumour (because although not very frequent, the fibro-angiomas of the external auricular canal are not, however, very rare) as on account of the histological structure of the tumour. The fact of the endo- and perivascular endothelium participating in a connective tissue neoplasm does not seem to me to be without interest.

The case is one of a girl, aged twenty-two, of healthy and robust physical constitution, who was sent to me by one of my colleagues in the country, to be treated for a polypus of the left ear which, according to the doctor, was of some twelve months' standing, causing a copious secretion of pus from the ear. On examining the patient after well syringing, I found in the left external auricular meatus a tumour of the size of a bean, which occupied all the lumen of the passage; the pus oozed from the deepest part. The tumour, of reddish-brown colour, of irregular and knotty surface, was movable and sprang from the posterior-superior wall of the canal, so that I could easily take it away with Wilde's polypus-remover; but after having taken away the greatest part of the tumour a copious hæmorrhage took place, which was stopped with a very compact tampon composed of iodoform gauze.

The result of the microscopic examination by my colleague Dr. Zenoni was as follows: The tumour is of a connective endothelial nature, distinguishable from the real sarcomata, therefore of benign nature: the surface is covered with stratified and pavement epithelium; it consists in some parts of younger and in others of more developed and resisting elements; the first appear formed of delicate stroma of connective fibrils, very loose, among which are found scattered cellular elements, rounded and polyhedral with very obvious nuclei. There are besides other cells with a lamellated and slightly granular protoplasm, and with nuclei rather pale, and in some cells there are two or three nuclei. The principal characteristic of the tumour is shown by numerous vessels which cross it in every direction, forming numerous anastomoses and disposing themselves sometimes in groups, so that in places they present a plexiform aspect. These vessels are subject to special alterations, sometimes on the part of the sheath of the vessels, sometimes on the part of the endothelium of

the internal membrane. The wall of the vessels appears for the most part thickened by reason of the proliferation at the periphery of the connective tissue and of the endothelium, and stand out clearer from the remaining fibrillous network, where it is more relaxed and thin, whilst where the same is thicker and fasciculated the limit is not well marked. Besides, whilst in the first case the vessels have a circular section, in the second, the section is irregular and narrowed, owing to the compression produced by the tissue. At the same time, with the thickening of the walls, the diminution of the calibre of the vessels takes place on account of the production on the interior wall of endothelial elements, which sometimes reach the point of obliterating them. We can observe besides an endothelial production of lamellated and starry cells which, mingling their prolongations, form a species of cellular network both in the lumen of the vessels and round about them. From it and out of it areas of endothelial connective tissue are formed, in which we can no longer recognise the vascular origin, whilst the endothelial character of the elements stands out. These same areas in the oldest part of the tumour are much poorer in cells, and are almost exclusively formed of bands of connective tissue, more or less compact, in which here and there appear blood-vessels either compressed or else with rather ample calibre.

The fibrillous connective tissue within the vessel-walls is rich in young cells with rounded nucleus, and is subject, little by little, to the fibromatous transformation for the production of the connective tissue around the vessels. The endothelial elements of the connective lymphatic vessels take part in this process with their proliferation and presenting karyokinetic figures. Gradually as this production increases, there takes place reduction of the fibrillous areas with young rounded inter-vascular elements, so that the intervals which separate the vessels from one another progressively diminish, and a thickening of the vessels in the most compact parts is the result. The tumour, therefore, can be classed as an endothelial fibro-angioma.

In accordance with the microscopic examination, I limited the after-treatment of the tumour to a careful scraping of its base, and to successive cauterisations, till the meatus presented a smooth and regular scar. After a short time the purulent secretion completely ceased, and the patients went away cured.