CYSTS IN LYMPHOID TISSUE, AN EXCEPTIONAL MANIFESTATION OF TONSILLAR RETROGRESSION.*

BY JONATHAN WRIGHT, M.D., NEW YORK.

In various papers I have had occasion to refer to the phases presented by the retrograde metamorphosis of hypertrophies of the lymphoid tissues of the nose and throat. In spite of its pathological features this is to be regarded as essentially a physiological process, a process of adaptation of the organism to changing conditions. The change is from adolescence to maturity and old age, from a period of constructive metabolism through the equilibrium of maturity to the crumbling metabolism of age. This is a formula, not to be applied strictly to the individual, but more properly to the tissues, for these changes in the tissues only keep step in a general way, varying greatly in different persons, to the number of years registered by the individual. In the vast majority of individuals however the changes are fairly uniform with age. This retrograde change, as to the tonsillar epithelium finds expression in the pathological condition known as Keratosis, as to the stroma in fibrosis, as to the bloodvessels in the thickening of their coats and the obliteration of their lumina. I have pointed out¹ how this change in the epithelium and in the stroma produces the gross and minute histological appearances, which have been wrongly called papilloma of the tonsils, supernumerary tonsils, etc. The growth of fibrous tissue in the stroma and in the bloodvessel walls is the process by which the lymph spaces are closed to the wanderings of the leucocytes in their various forms. Thus we have regularly a diminution in the bulk of the hypertrophies, and sometimes larger or smaller bits of tonsillar tissue are crumbled off the surface and from the crypts. This which I have ventured to call "Autoclasia" of the tonsils and which I have regarded as an auxiliary process of retrogression, is not, I believe, such an exceptional process as it may at first sight appear to other observers.

Some recent observations have served to convince me that there are other rarer manifestations of this retrograde metamorphosis which have not been noted in the pathology of the tonsils. Incidentally I may remark that I regard the occasional presence of bone and cartilage in the faucial tonsil as also an exceptional expression of

* From the Laboratory of the Manhattan Eye, Ear and Throat Hospital.

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this retrogression. There is no doubt in my mind that this is the continuation beyond the usual limits of fibrous metaplasia. It is analogous genetically to the senile changes observed in numerous localities during the degenerations of age.

The object of this paper however is to suggest an explanation for a rare pathological condition of the lymphoid tissue itself.

In several contributions* dealing with cyst formation in the nose and throat I have reported cyst cavities within the lymphoid tissue itself. I was inclined, for the want of a better explanation, to ascribe their formation to the dilatation of the lymph spaces. I have in mind only the two cases referred to above, but I am fairly confident that I have observed the condition much more frequently than this would indicate. At any rate the recent observation of another case, revealing this time what was not noted before, the presence of a large amount of oily substance flowing from the seat of operation in the removal of lymphoid tissue from the patients naso-pharynx, gave a clue to the genesis of the cyst which I had not had before. This extraordinary clinical manifestation had not been noted in other cases, I suppose, because of the small size of the cyst from which the fluid came. There was no cavity to be observed in the shreds of tissue removed which could have harboured the quantity of fluid which flowed from the mouth of the patient. She was a healthy woman twenty-one years old, with nothing exceptional in her history of her symptoms. The amount of fluid could not be estimated owing to its mixture with the usual pharyngeal and buccal secretions. It was enough, however, to give such a decided oily character to the discharge of more than a tablespoonful in all that it aroused curiosity as to its origin, which at the time of operation was entirely inexplicable. The tissue in situ did not differ materially in appearance from the usual. Sections for the microscope did not reveal the large cavity from which the fluid came. That had been ruptured and the cavity having no true walls could not be recognized, but several smaller cavities containing traces of fat cells were seen, one of which I have had drawn in the accompanying figure, under moderate magnification. Under a higher power (1-12 oil im.) study of the leucocytes along the edge of the walls, discloses some of them in the process of disintegration. Free nuclei, occasionally segmented into four, may be seen along the free edge of the cavity, the cytoplasm having apparently been liquefied, leaving behind the more resistant karyoplasm, which under the stimulus of changing conditions has begun an abortive attempt at proliferation.

* *Am. Journ. Med. Sc.*, Phila., June, 1903.
N. Y. Med. Journ., Dec. 7, 1895.

There can, therefore, be no doubt of the nature of the cysts, in this particular case at least, nor of their genesis. It is fair also to assume that this was the structure and genesis of the other cases I had observed. Clinically, as I have said, the fluid escaping was not noticed on account of the smaller size and microscopically the outline of fat cells in the other cases had been lost in the granular contents of the cavity, having been broken up by degeneration, or having become granular in the course of hardening. The question naturally arises; may not a certain amount of this fatty degeneration go forward constantly in the retrogression of the lymphoid tissue? Not enough to make cavities at certain localities, but enough to lead to the slow subsidence of adenoids and tonsils?

Personally I think this is improbable, owing to the fact that out of the many hundred perhaps thousand slides of preparation of such tissue which I have examined in the last ten years or so, I have noted no indication of it. Nevertheless it is very possible that with proper hardening and staining for that purpose the process might be revealed as one of more frequency and importance than supposed.

As it was, this pathological phenomenon, at first simply attracting attention from its novelty, now falls into line in my mind as a further manifestation of the well known laws of growth and decay of tissue to meet the changing exigencies of the organism, of which it is a part, subordinated to the life processes of the whole.

103 Park Ave.

An Unexplained Case of Sudden Death.—VICTOR LANGE.—*Monatsschr. f. Ohrenh.*, Berlin, February, 1905.

A boy, 4 years old, was tracheotomized for diphtheria. The removal of the tube was followed by dyspnoea, on account of excessive granulations. After repeated curettings the removal of the tube was finally accomplished, the boy suffering only from slight dyspnoea on exertion. One week after the removal of the tube he came under the observation of the author, who attempted to make a laryngoscopic examination, to which the child made no resistance. As soon as the mirror was introduced into the child's throat, he was seized with an attack of laryngeal spasm, in which he died. No autopsy was made.