CLINICAL RECORDS

RHINOSCLEROMA AND MALIGNANCY

TWO CASES OF RHINOSCLEROMA ASSOCIATED WITH CARCINOMA

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RHINOSCLEROMA is a chronic granulomatous condition which affects mainly the nose and nasopharynx and is fairly common in Egypt. Its ætiology, clinical features, pathological picture and methods of treatment have been discussed by many authors. It is known that this granuloma spreads mainly in the soft tissues and in the connective tissue spaces and that it does not invade bony structures. It is not recorded that rhinoscleroma assumes malignant characters or predisposes to malignant change.

I am going to report here two cases of typical rhinoscleroma associated with an epidermoid carcinoma. When I saw the first case in October, 1953, I hesitated to assume a causal relationship between the two lesions as it was the first instance amongst several cases examined both clinically and pathologically. Therefore, at that time I thought that the two diseases might have occurred together by mere coincidence. But when I came across the second case one year later, in a routine pathological examination of a case of rhinoscleroma without any malignant change being suspected clinically, the question was again raised. The two lesions might not be present together by mere coincidence but the chronic irritation and sepsis produced by rhinoscleroma and which, as we know, lead to squamous metaplasia of the covering nasal mucosa, might in the long run lead to malignant change in this epithelium.

Case Reports

Case I. A male patient, aged 40 years was admitted to Demerdash hospital with a huge ulcer affecting most of the bony and cartilaginous parts of the nose and complicated with secondary infection. The clinical diagnosis was either a specific or a malignant ulcer and a biopsy taken. This was examined and the report (567/53) issued at that time read: "The biopsy received shows the presence of two pathological lesions:

(1) A typical rhinoscleroma with numerous Mickulicz cells and some Russell bodies partly covered with stratified squamous epithelium.
(2) A moderately differentiated squamous-cell carcinoma which is seen infiltrating the tissues of the rhinoscleroma and probably related to the covering epithelium (Fig. 1).

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It would be of interest to know the previous history of this case and whether it started as a granuloma (rhinoscleroma) which was later on complicated by a malignant ulcer or whether the two lesions are present together just by mere coincidence. Was the presence of rhinoscleroma in this case of importance as regards the development of malignancy?"

Case II. A female patient, aged 30 years, came to the out-patient department in *October, 1954*, with a granulomatous lesion in her nose which was suspected



FIG. 1.

A typical rhinoscleroma with numerous Mickulicz cells and some Russell bodies partly covered with stratified squamous epithelium.

to be a rhinoscleroma. A biopsy was sent to the Pathology Department for verification of the diagnosis and the report issued was as follows (585/54): "This is essentially a rhinoscleroma; but the covering epithelium shows marked hyperplasia, loss of polarity of the cells, hyperchromation and mitosis of the nuclei and early invasion of the deeper tissues (Fig. 2). These appearances are an indication of an early malignant change in the covering epithelium."

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Discussion

The association of rhinoscleroma and cancer in one lesion at once raises the question of whether there is a relation between the two diseases, i.e. whether rhinoscleroma predisposes to malignancy or the association is only a matter of coincidence. Amongst other workers I have seen a large number of cases of rhinoscleroma but I did not come across or read about cases associated with malignant change as the two instances recorded above. The only known



FIG. 2.

This is essentially a rhinoscleroma but the covering epithelium shows marked hyperplasia, loss of polarity of the cells, hyperchromation and mitosis of the nuclei and early invasion of the deeper tissues.

example of a granuloma that may be complicated by malignancy is lupus vulgaris. Rhinoscleroma runs a prolonged course and in the large majority of cases examined histologically there is definite metaplasia of the covering epithelium into stratified squamous and there is also evidence of secondary microbic infection. If we take the analogy of those cases of epidermoid carcinoma which may originate in bronchiectatic cavities, we will find similar conditions in the two cases. In both, the chronic irritation and sepsis produce

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squamous metaplasia of an epithelium which is normally columnar and then in the long run, abnormal and active hyperplasia of this squamous epithelium leads to the development of a squamous-cell carcinoma.

I have searched the available English literature for cases similar to those recorded above but no such cases were found. Therefore malignancy supervening on rhinoscleroma must be regarded as a rare occurrence—though some cases were probably overlooked.

Summary

Two cases of rhinoscleroma associated with cancer are recorded. To the writer's knowledge they are the first cases showing this association to be recorded in the English literature. It is thought that the two lesions are not present together by mere coincidence but that the malignant change has resulted from the long-continued irritation and sepsis due to the presence of rhinoscleroma.

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