Don’t let the Clinical Diagnosis Prejudice the Histopathological Reporting: A Case of Suture Granuloma

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ABSTRACT

Patient with history of smoking and chewing tobacco reported with a complaint of whitish discolouration on right buccal mucosa which was slightly raised and erythematous. Clinical diagnosis of speckled leukoplakia was given. Histopathological diagnosis was that of Epithelial hyperplasia. Lesion on complete excision histopathologically gave a diagnosis of Moderate dysplasia. Patient was kept under observation. Patient was reported again after 2 months with swelling in the previous area. Excision biopsy was done and the diagnosis was that of a foreign body granuloma. It was also noted on detailed history of the patient, that he had undergone an extraction in that region 6 months back which resulted in a suture granuloma.

KEYWORDS: Foreign Body Reaction, Epithelial Hyperplasia, Foreign Body Granuloma, Suture Granuloma

INTRODUCTION

Suture granuloma is a benign tumor developing in the presence of surgical suture materials. It usually occurs years after different surgical procedures. Here we report a case involving a 62-year-old man who underwent extraction of tooth in right side resulting in suture granula.

CASE REPORT

A patient aged 62 years reported to the OPD with a complaint of whitish discoloration on the right side of buccal mucosa for the past 6 months. On intraoral examination, a white patch of an approximate size of 1.5 x 1 cm was noted in relation to 16/46 region. The lesion was slightly raised, with an erythematous region in the center. On palpation, the lesion was slightly hard, had well-defined margins with a rough, uneven surface.

The patient gave a history of smoking for the past 25-30 years and betel quid chewing for the past 20 years. No regional lymphadenopathy was noted. Patient was asymptomatic. A clinical diagnosis of speckled leukoplakia / early malignant change was considered. An incisional biopsy was done and was sent for histopathology.

Histopathological examination revealed a para-keratinized stratified squamous epithelium of varying thickness overlying a highly vascular connective tissue stroma. The epithelium at most of the areas was hyperplastic (Fig: 1). One end of the bit was devoid of epithelium but exhibited a focal area of the eroded epithelium. The epithelial cells appeared moderately dysplastic with nuclear and cytoplasmic pleomorphism and increased nuclear-cytoplasmic ratio. An intense inflammatory infiltrates composed predominantly of lymphocytes was noted juxta-epithelialy in this area.

On the above histopathological findings, a diagnosis of Epithelial hyperplasia with a focal area of eroded epithelium exhibiting dysplasia was given.⁴ ¹,²,³

The patient was posted for complete excision of the lesion. Excision of the lesion was done with margin on the anterior region and slightly close margin on the posterior end of the lesion and sent to the Oral pathology department.

Histopathology revealed atrophic para-keratinized...
stratified squamous epithelium overlying a connective tissue stroma. Epithelium showed grade 2 dysplastic features such as hyperchromatism, altered N/C ratio, nuclear and cellular pleomorphism, which was limited to the lower two-third of the surface epithelium. (Fig: 2) Underlying connective tissue showed densely collagenous stroma with diffuse chronic inflammatory infiltrate and intense vascularity.

A diagnosis of the epithelium with moderate dysplasia⁴ was given. The patient was kept under strict observation and follow up. After two months of the complete excision, the patient came back to the OPD with a complaint of growth over the same area from where the excision was done. On examination, an enlarged outward growing lesion was noted at the previous biopsy site. On palpation, induration was noted. As the previous report was of moderate dysplasia, a clinical diagnosis of early invasive malignancy was considered. The excision of the lesion was done.

Histopathological examination revealed a moderately collagenous connective tissue stroma and a small tag of stratified squamous epithelium. Stroma showed numerous birefringent circular and rod-shaped structures. Numerous multinucleated giant cells with haphazardly arranged nucleus were noted around these structures. Stroma showed intense diffuse and focal collections of chronic inflammatory cells predominantly macrophages and some lymphocytes. Vascularity was intense with formed and forming blood vessels (Fig: 3, Fig: 4).

Based on the above histopathological findings, a diagnosis of foreign body granuloma⁵,⁶,⁷ (suture material) was given. On digging deep into the patient history, it was understood that the patient had undergone extraction of 17 six months back, and he was given a suture after extraction.

**DISCUSSION**

In routine practice, it is easy to be misled by clinical features alone. In the above case, one can see that at a glance, a 62-year-old male chronic smoker with no other signs or symptoms presenting with a white patch and erythematous area in the center will be hastily given a clinical diagnosis of leukoplakia / early malignant change. Habit history strongly correlated with clinical DDs like LKP / Early malignant changes in a white lesion.

Other DDs of chemical burn candidiasis and lichen planus were ruled out by history taking.

Histopathology of the given bit, which was not actually from the representative site, showed only hyperplastic epithelium with focal dysplasia. The pathologist was looking for features associated with Leukoplakia or malignancy based on the clinical presentation of the lesion, history and provisional clinical diagnosis.

Even after excision, the pathologist could only see atrophic epithelium with grade 2 dysplasia. Stromal changes noted were only dense collagenicity, diffuse chronic inflammation, and intense vascularity, which led to a histopathological report of the epithelium with moderate dysplasia. Again the history of previous records of incision biopsy was influencing the pathological diagnosis.

The clinical presentation of the recurrent lesion reporting within one month of the excision was also misleading. Coupled with the early recurrence, the clinical presentation, and the biopsy report, the clinician naturally considered early malignant change.

Excision of the recurrent lesion did give the pathologist a definite clue to the lesion. The presence of birefringent circular and rod-shaped structures in a granuloma with multinucleated giant cells could not be misinterpreted.
Even with the strong influence of previous records, the pathologist was on the right track.

A histopathologist can only report what he sees, combining his visual judgment with the clinical judgment of the clinician. Many times we see only what we want to see. The foreign body cells were missed in the first excision biopsy because the pathologist was not contemplating its presence. If there was some clue, special staining might have revealed the foreign body cells. Besides, the diffuse pattern of inflammatory infiltrate and vascularity instead of a granuloma and absence of giant cells coupled with the history and clinical diagnosis mislead the pathologist.

CONCLUSION

We are presenting this case report just to show that many times the obvious leads to an erroneous diagnosis.

REFERENCES