



Figure 3. Histological analysis patient B.

Patient B: a different aspect resembling inflammatory fibrous hyperplasia could be seen. In fact, at scanning electron microscopy, a pseudoepitheliomatous hyperplasia overlying sclerotic lamina propria has been observed.

At higher magnification, far from the lymphocyte-rich inflammation, mainly plasma cells could be seen around small vessels (Fig. 3).

Discussion and conclusion

To date, only a few cases have been published on the etiology and pathogenesis of Stillman's clefts and with the aim of explaining their histological features. This may depend both on the rarity of such lesion and on patient's agreement in accepting surgical procedures to modify it, particularly in asymptomatic cases. Moreover, in recent years, literature has focused primarily on different surgical techniques aimed at the resolution of esthetics with primarily the aim of seeking at the maintenance of the health of periodontal tissues. For this reasons, we decided to investigate the histological characteristics of two different Stillman's clefts and correlate them with their clinical presentation. According to our preliminary results, the case A (cleft from healthy periodontal tissues) showed histological features resembling acute and mild gingivitis. The first one with predominantly T small lymphocytes was sided in correspondence of the cleft and the mild type with few plasmacells around the cleft in apparent clinically healthy gingiva. Case B (periodontal disease-treated associated cleft) showed histological features similar to chronic gingivitis or mild periodontitis with a predominantly B

cells response with only few plasma cells and chronic scarring of lamina propria.

This preliminary study aimed at also defining a predictable methodology to obtain proper amount of soft tissue from the lesion to then fully obtain comprehensive histological evaluation. The future perspectives are to analyze the cleft sample also on an ultrastructural level by transmission electron microscopy to better describe the presence and amount of both collagen and other matrix components. Moreover, an immunohistochemical study should be carried out in order to understand the cellular composition and the expression of inflammatory mediators within the lesion. For these reasons, a larger sample is needed to reach a better understanding of the pathogenesis of this common lesion.

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