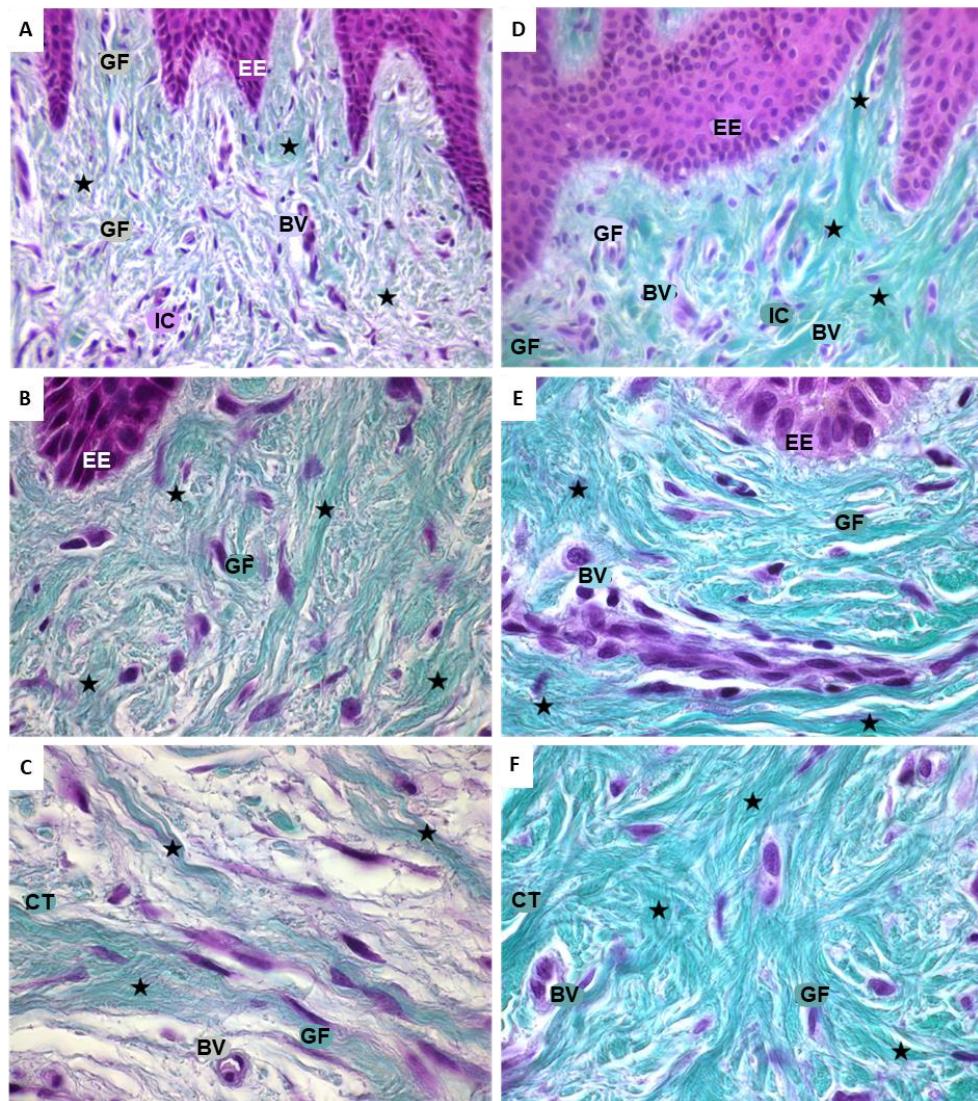


**Figure 1. Histological cuts of gingival tissue stained with hematoxylin-eosin.** A, B, C. Gingival tissue of a healthy individual without orthodontic apparatus. D, E, F. Orthodontic patient with gingival hypertrophy. A, D. Organization of epithelial and connective tissue of a healthy individual and a patient with gingival hypertrophy. B, E. Presence of collagen fibers close to PE. C, F. Connective tissue with the presence of collagen fibers, blood vessels, and gingival fibroblasts. Note the abundant presence of collagen fibers in patients with gingival hypertrophy. ET: epithelial tissue; EE: epithelial extensions; CT: connective tissue; GF: gingival fibroblasts; BV: blood vessels; IC: inflammatory cells. Black star: collagen fibers. A, D. Black bar: 100  $\mu$ m. B, C, E, F. black bar: 10  $\mu$ m.

Source: by authors

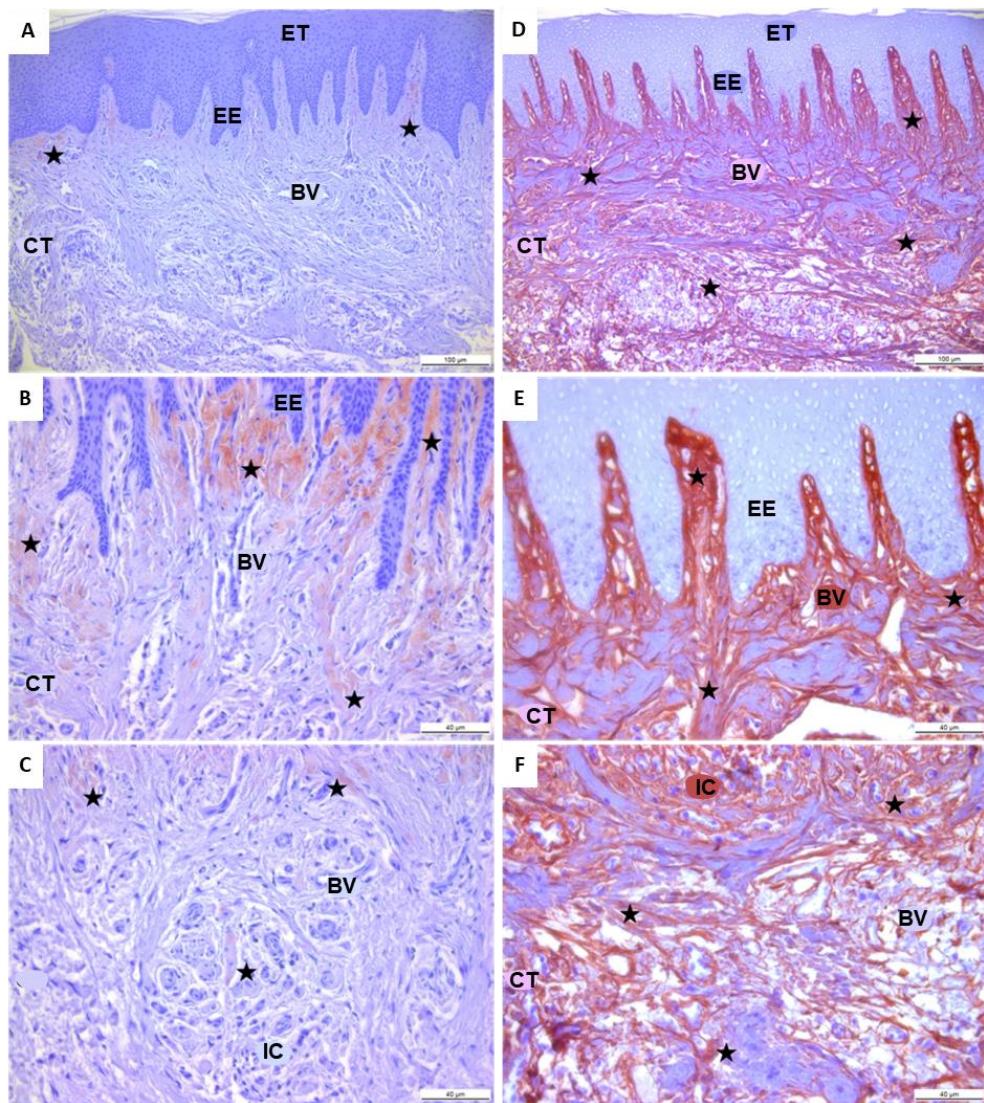


**Figure 2. Microphotograph of histological sections of gingiva colored with Masson-Goldner stain. A, B, C.**

**Distribution of collagen fibers in gingival tissue of individual with no orthodontic treatment. D, E, F.**

**Orthodontic patient with gingival hypertrophy. Green: collagen fibers; nuclei in violet. ET: epithelial tissue; EE: epithelial extensions; CT: connective tissue; GF: gingival fibroblasts; BV: blood vessels; IC: inflammatory cells. A, D. Black star: collagen fibers, 40x. B, C, E, F. Black star: collagen fibers, 100x.**

*Source: by authors*



**Figure 3. Immunohistochemical expression of type III collagen in histological sections of gingival tissue.**

**A, B, C. Immunostaining of type III collagen in gingival tissue of an individual without orthodontic treatment. D, E, F. Orthodontic patient with gingival hypertrophy.** A, D. Type III collagen fibers distributed in basal lamina and connective tissue. B, C, E, F. Arrangement of type III collagen fibers in the lamina itself and connective tissue. In brown: type III collagen fibers. EE: epithelial extensions; CT: connective tissue; VS: blood vessels; IC: inflammatory cells. Nuclei in violet. Black star: type III collagen fibers. A, D. Black bar: 100 µm. Black bar: B, C, E, F. 40 µm.

Source: by authors