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Histological study of the goat teat

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The tissues that form the teat directly affect the yield of the mammary gland. Its structure determines the dairy and milking method. In goat unlike cow and sheep, there are not studies that focus on this structure. Therefore, it is important to know the histological structure that comprises. This preliminary study aims to describe the goat teat and discuss the possible differences that exist with the bovine and ovine teats. 36 teats from dairy goats were collected and fixed in formalin. Samples were cut in transversal and longitudinal sections and stained with hematoxylin and eosin and immunohistochemistry techniques. Macroscopically, we observed a lot of teat sizes, not only in width, but also in height that showed a teat morphological variety. It could associate with the low breed selection pressure. Histological results showed a 75% of goats presented sebaceous glands, however this structure is not usually observed in cows. Sweat glands were observed in 89% of the samples. The blood vessels represented 2.4% of total tissue. The Fürstenberg's Rosette, a slightly projecting fold, is clearly noteworthy where a high percentage of the samples showed nodular subepithelial lymphoid proliferations. In conclusion, the histological structure of the goat teat presents great similarity to the cow although some differences have been found. The presence of lymphoid proliferations can help the immune response against pathogens.