

## Annotation

Maintaining teeth is critically important in intricate clinical practice, particularly when both the periodontium and pulp are concurrently compromised [1]. In these circumstances, tooth-preserving operations represent a crucial therapeutic approach. The management of periodontal disorders is predicated on the principles of eradicating and inhibiting pathogenic microorganisms, utilizing local anti-inflammatory and antibacterial agents. The management of periodontal-endodontic diseases complicated by furcation perforation in molars poses a considerable therapeutic difficulty [2]. The pursuit of suitable treatment modalities for such situations remains pertinent [3].

## Purpose of study

This study seeks to assess the clinical efficacy of treatment utilizing Alvostaz sponge in periodontal-endodontic diseases characterized by furcation perforation of molars

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## Materials and methods

The research investigated and addressed 30 individuals afflicted with moderate chronic generalized periodontitis (code K05.31). Three patients were diagnosed with periodontal-endodontic diseases, further aggravated by holes in the molar furcation area. The medication "Alvostaz sponge" was administered to these patients

## Result of study

Six months of active observation indicated no dental movement in the patients. The restoration of masticatory function during consumption resulted in an enhanced quality of life. Activation of fibroblasts by TNF- $\alpha$  results in enhanced production of the chemokine MCP-1 and the inflammatory mediator IL-6. The incorporation of "Alvostaz sponge" extract into the cell culture exhibits an inverse correlation: increased extract concentration corresponds to a decreased level of MCP-1. This signifies the capacity of the "Alvostaz sponge" to inhibit the synthesis of this chemokine. The elevation of IL-6 concentration resulted in a corresponding rise in the concentration of the "Alvostaz-sponge" extract in the medium containing fibroblasts pre-activated with TNF- $\alpha$ .



## Conclusion

The dynamic observation conducted pre- and post-treatment substantiates the potential to enhance patients' quality of life through the preservation of tooth functionality..

## References:

### Reference:

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