

Application of hyaluronic acid in non-surgical treatment of periodontitis

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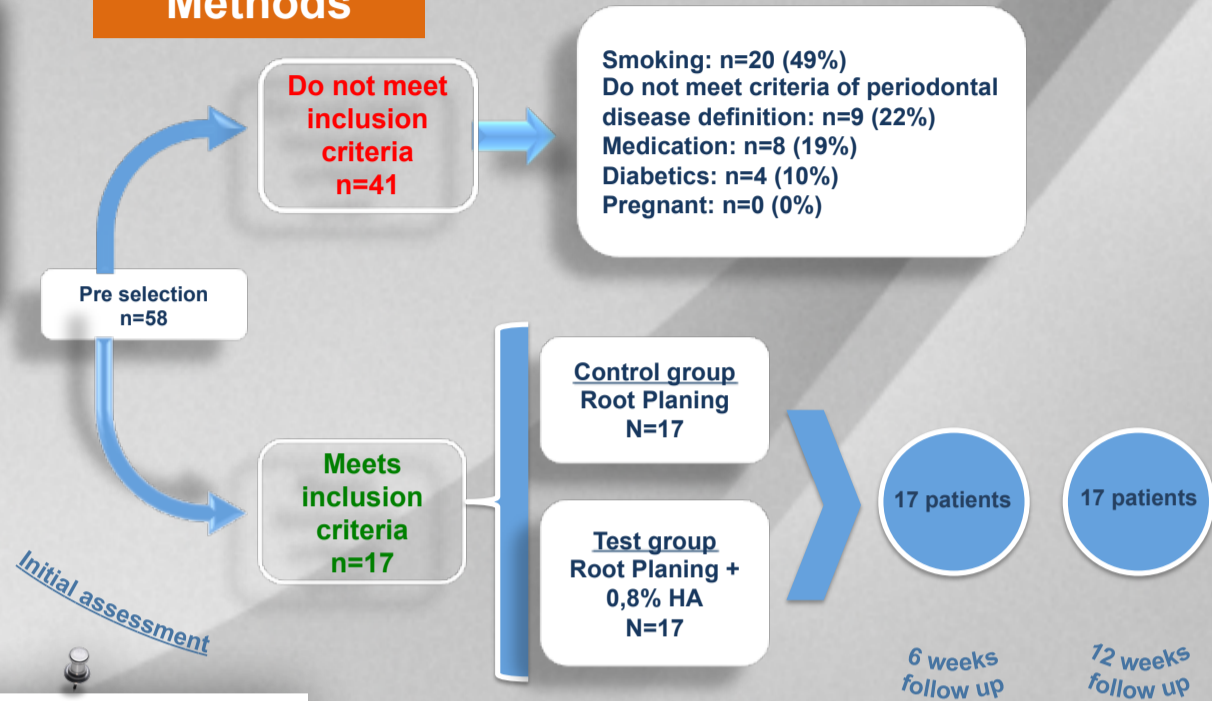
Introduction

Hyaluronic Acid (HA) has been suggested as a potential local chemotherapeutic agent in periodontitis treatment, due to its various chemical and biological properties, such as its bacteriostatic, anti-edematous, antioxidant, healing and regenerative capacity.

Aim

To evaluate the effect of topical application of 0,8% hyaluronic acid (Gengigel®) as a coadjuvant in the non-surgical treatment of periodontitis through the monitoring of several periodontal clinical parameters: Plaque index (PI), Gingival index (GI), Bleeding on probing (BOP), Probing depth (PD) and Clinical attachment level (CAL).

Methods



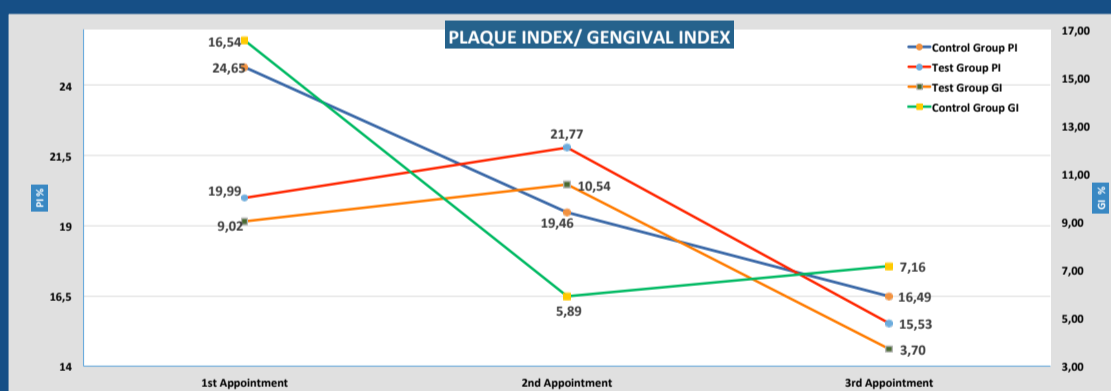
Study concordance:
Intra-examiner: 0,996
Inter-examiner: 0,995

Randomized controlled trial with a split mouth design

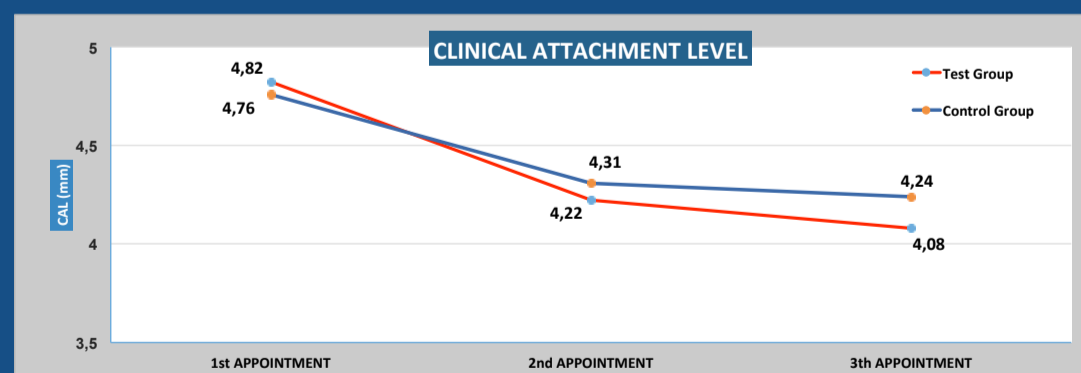
Results/Discussion

The investigation focused on a population with a mean age of 52 years, which may influence the results, since there is a decrease in the healing capacity.

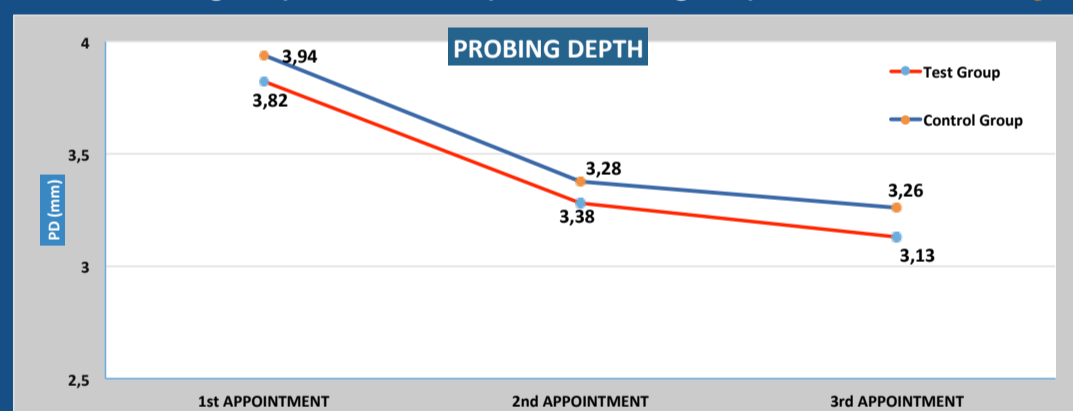
When the results between the appointments were analyzed, there was a statistically significant improvement in the GI, BOP, PD and CAL parameters in both groups. When comparing the results between the control group and the experimental group, the **statistically significant difference** occurred in **BOP**.



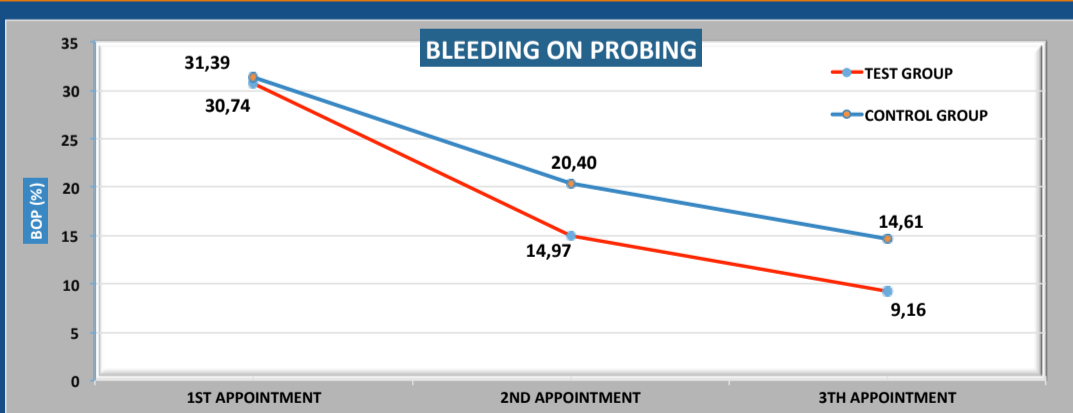
Improvements due to an institution of preventive methods of motivation for plaque control, as well as in oral hygiene techniques.



Improvements may be due to an increase in the inflammation of gum tissues.



There were no significant changes, probably due to an increase in IP in the 2nd consultation, to the fact that only an application of AH was made and due to the depth of the pockets that makes it difficult to remove the biofilm layer.



Improvements are probably due to the anti-inflammatory and bacteriostatic properties of HA, as well as root planing.

Conclusion

At the end of the period of observation, there was an improvement of all periodontal parameters in both groups. When comparing the results between groups, we have a more significant improvement in the experimental group and a statistically significant difference on Bleeding on probing in the 3rd appointment, a result that can be attributed to the anti-inflammatory properties of HA.