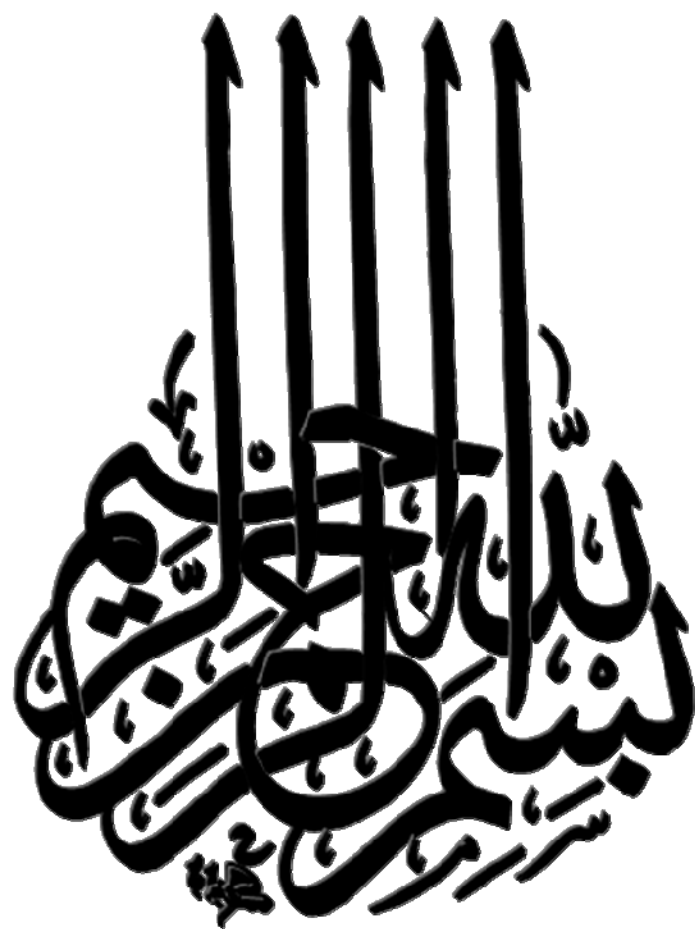




**Healing of Chronic Apical Lesions Using
Hyaluronan versus Conventional and Surgical
Treatment.**

A Comparative Study (In Vivo)

A Thesis Submitted to the
Faculty of Oral and Dental Medicine, Cairo University
for Partial Fulfilment of the Requirements of the Doctor's Degree
In Endodontics

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Dedication

To my dear father, my lovely mother,
my supportive husband, my sweet children and my sisters.

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Keywords:

Chronic apical lesion- Hyaluronan- Conventional endodontic treatment- Surgical endodontic treatment.

Abstract:

The present study investigated the effect of Hyaluronan combined with conventional endodontic treatment, on the healing of chronic apical lesions. Forty cases, of single rooted teeth with chronic apical suppurative periodontitis, were equally divided into two main groups (control and test). In the control group I cases were either subjected to conventional endodontic treatment alone in subgroup I(1) or to endodontic treatment followed by periapical surgery in subgroup I(2). In the test group II cases were subjected to conventional endodontic treatment with application of Hyaluronan through the root canal by its injection into the apical lesion via the apical foramen in subgroup II(1) or through the sinus tract in subgroup II(2). Clinical and radiographic evaluations were done immediately postoperative; afterwards follow up for all the cases was carried out at 1, 3 and 6 months postoperatively. Statistical analysis of the collected data showed a more significant difference in the percent change in lesion size and densities in favor of the experimental group at all the follow up intervals. In the control group I, conventional subgroup I(1) gave better results than surgical one I(2) all over the study period. While in the test group Hyaluronan injection through apex showed statistically significant results than injection through sinus only after 6 months postoperatively. It was concluded that chronic periapical lesions reacted well to Hyaluronan in conjunction with conventional endodontic treatment.

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