



EVALUATION OF LIFE QUALITY AFTER APICOECTOMY

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INTRODUCTION: Pain and swelling are common complications following oral surgical treatment. Approximately two thirds of the patients require analgesics during the postoperative period. Kvist and Reit, Shugars et al reported that on the evening after endodontic surgery, almost all patients experienced pain with 67% requiring analgesics. Swelling was present in all patients and reached the maximum on postoperative day 1. Other complications, such as hemorrhage or ecchymosis may occur during the postoperative period. Assessment of patient perception of quality of life following dental treatment is a valuable instrument in predicting the postoperative symptoms.

AIM: of this study was to evaluate patient experience of quality of life following apicoectomy using two different techniques: preoperative and intra operative ortograde canal opturation.

MATERIAL and METHOD: The study consisted of 40 patients referred for oral surgical treatment (apicoectomy with periapical osteotomy). Three operators (CD, BE, KP) were carried out the treatments. An equal number of patients were assigned to each group.

Group 1 - preoperative canal opturation,
Group 2 - intra operative ortograde canal opturation.

Time needed to complete each surgical procedure, starting from the first incision to finishing the last suture, was recorded for each technique. Both groups received the following postoperative instructions:

- (1) avoid mouth rinsing, hard and hot food, hot drinks, physical activities, and tooth brushing during the day of operation;
- (2) apply cold compresses on the skin at the site of surgery intermittently every 15 minutes for the remainder of the day;
- (3) chlorhexidine 0.2% mouth rinses starting the day after surgery for 7 days.

Since pain and/or swelling could appear after the procedure, patients could take over-the-counter analgesics if needed.

Table I. Quality of life questionnaire

	Day 1 - 7	Not at all 1	Very little 2	Some 3	Quite a bit 4	Very much 5
1 Do you experience any difficulties with mouth opening?						
2 Do you experience any difficulties with chewing						
3 Are there any foods that you can't eat now?						
4 Do you experience any difficulties with speaking?						
5 Do you experience any difficulties with sleeping						
6 Have you missed your work/school?						
7 Do you experience any difficulties with your daily activities?						
8 Do you have swelling?						
9 Do you have bruises?						
10 Do you have bleeding?						
11 Do you feel nausea?						
12 Do you feel a bad taste or breath?						
13 What is the worst pain that you felt?						
14 What is the average degree of pain that you felt?						
15 Did you take any pain-killers today?						

The patient's answers were referred as:

- not at all - 1
- very little - 2
- some - 3
- quite a bit - 4
- very much - 5

All patients were given a questionnaire with 15 questions to evaluate their quality of life for 7 days after the oral surgery interventions.

RESULTS:

There were no significant differences found in the distribution of patients according to age, gender, periradicular diagnosis, and site of operation between the two groups.

The average time needed to complete the surgical procedure for Group 1 was approximately 20 minutes (range 15 to 35 minutes), and for Group 2, approximately 40 minutes (range 30 to 55 minutes).

There was no significant effect of age or gender on postoperative patient assessment of quality of life.

Table II presents the patients' experience of quality of life.

In Group 2, patients reported significantly more difficulty in mouth opening, mastication, and the ability to speak on days 1 and 2 postoperatively (P \.05).

There was no difference in postoperative swelling between the 2 groups, but there was significantly less pain experience with a faster decrease in pain levels in Group 2 (P \.01).

Furthermore, on day 5, patients in Group 1 reported significantly more pain and took significantly more analgesics. (Fig 1).

Table II. Patients' experience of quality of life for both groups

	Day 1	Day 2	Day 3	Day 4	Day 5	Day 6	Day 7
Mouth opening G1	2.9(61.3)	2.7(61.1)	2.3(61.1)	2.1(61.1)	1.7(60.8)	1.6(60.7)	1.4(60.7)
Mouth opening G2	3.3(61.3)	3.3(61.1)	2.5(61.0)	2.1(61.0)	1.7(60.7)	1.4(60.9)	1.3(60.6)
Mastication G1	3.7(61.2)	3.1(61.2)	2.6(61.2)	2.1(61.0)	1.7(60.9)	1.6(60.8)	1.4(60.7)
Mastication G2	4.2(61.1)	3.3(61.2)	2.5(61.2)	2.1(61.0)	1.6(60.9)	1.5(60.1)	1.4(60.8)
Eating satisfaction G1	3.4(61.4)	2.8(61.2)	2.3(61.1)	2.0(60.9)	1.6(60.7)	1.5(60.5)	1.4(60.5)
Eating satisfaction G2	3.7(61.3)	3.1(61.4)	2.6(61.3)	1.9(61.1)	1.6(60.9)	1.4(60.9)	1.3(60.7)
Speech G1	2.7(61.4)	2.2(61.1)	1.8(60.9)	1.7(60.8)	1.4(60.6)	1.3(60.5)	1.1(60.4)
Speech G2	2.9(61.0)	2.6(61.1)	2.2(61.1)	1.5(60.7)	1.4(60.7)	1.3(60.6)	1.2(60.5)
Sleeping G1	2.2(61.4)	2.0(61.1)	1.8(61.1)	1.7(61.1)	1.4(60.6)	1.3(60.6)	1.0(60.0)
Sleeping G2	2.3(61.0)	1.9(61.2)	1.6(61.1)	1.5(60.8)	1.1(60.3)	1.1(60.3)	1.0(60.0)
Work G1	3.6(61.5)	3.5(61.6)	2.8(61.6)	1.8(61.4)	1.5(61.0)	1.3(60.8)	1.1(60.2)
Work G2	3.8(61.7)	3.6(61.7)	3.1(61.7)	1.7(61.2)	1.3(60.9)	1.3(60.8)	1.1(60.5)
Daily routine G1	3.5(61.2)	2.9(61.3)	2.5(61.1)	2.2(61.1)	1.8(61.0)	1.4(60.6)	1.3(60.5)
Daily routine G2	3.2(61.1)	2.8(61.2)	2.4(61.3)	1.9(61.2)	1.5(61.0)	1.2(60.5)	1.1(60.4)
Swelling G1	3.6(61.1)	3.9(60.9)	3.4(60.9)	2.9(61.0)	2.3(60.8)	1.8(60.8)	1.3(60.6)
Swelling G2	3.4(61.2)	4.1(61.1)	3.6(61.3)	2.7(61.2)	2.0(60.9)	1.5(60.8)	1.2(60.4)
Ecchymosis G1	1.4(60.8)	1.3(60.6)	1.5(60.9)	1.5(61.0)	1.3(60.8)	1.1(60.3)	1.1(60.2)
Ecchymosis G2	1.5(61.0)	1.6(61.2)	1.5(61.1)	1.5(61.1)	1.3(60.8)	1.2(60.6)	1.1(60.3)
Bleeding G1	2.6(61.3)	1.6(61.0)	1.3(60.6)	1.2(60.5)	1.2(60.5)	1.2(60.4)	1.1(60.3)
Bleeding G2	2.4(61.3)	1.7(61.0)	1.4(60.7)	1.2(60.6)	1.2(60.6)	1.1(60.5)	1.1(60.4)
Nausea G1	1.5(61.0)	1.5(60.9)	1.2(60.5)	1.3(60.8)	1.1(60.6)	1.1(60.3)	1.1(60.2)
Nausea G2	1.5(60.9)	1.6(61.1)	1.5(60.8)	1.1(60.3)	1.1(60.2)	1.0(60.0)	1.0(60.2)
Bad breath G1	2.7(61.5)	2.5(61.2)	2.5(61.2)	1.9(61.0)	1.8(61.0)	1.6(60.9)	1.4(60.7)
Bad breath G2	3.1(61.3)	2.6(61.3)	2.4(61.1)	2.2(61.1)	1.7(60.8)	1.4(60.7)	1.4(60.7)
Maximal pain G1	3.5(60.9)	3.0(61.1)	2.7(61.1)	2.4(61.0)	2.1(61.0)	1.9(61.0)	1.6(60.8)
Maximal pain G2	3.3(61.2)	2.6(61.1)	2.2(61.0)	1.6(60.9)	1.3(60.6)	1.3(60.5)	1.1(60.3)
Average pain G1	3.1(61.0)	2.8(60.9)	2.5(60.9)	2.2(60.8)	1.9(60.8)	1.9(60.7)	1.6(60.7)
Average pain G2	2.9(61.2)	2.4(61.0)	2.1(61.0)	1.5(60.9)	1.2(60.5)	1.2(60.5)	1.1(60.2)

CONCLUSION:

High incidence of symptoms were reported by the patients in both groups. There were no significant differences found in the distribution of patients according to age, gender, periradicular diagnosis, and site of operation between the two groups.

The technique using the preoperative canal opturation provided significantly less postoperative pain, but more difficulties in mouth opening, mastication, and the ability to speak immediately postoperatively.

