

CLINICAL RESEARCH

## Frequency of Postoperative Pain After Endodontic Preparation with Rotary *versus* Manual Method

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### **ABSTRACT**

#### **INTRODUCTION**

The study aimed to assess the frequency of postoperative pain after endodontic preparation with rotary versus manual method by patient follow up.

#### **METHODS**

Study was conducted at IRE, Dental Department F G poly clinic hospital and Department of operative dentistry, Pakistan institute of medical sciences, Islamabad. A sample size of 64 patients was collected. Patients were recruited through non probability consecutive sampling. Patients were randomly divided into two group; In group A rotary system was used while in group B manual system was used. Data analysis was done using SPSS version 24. Chi-square and independent T test was applied. P value  $\leq 0.05$  was considered significant.

#### **RESULTS**

Among 64 participants there were 34(53.1%) male and 30(46.9%) female. Mean age of patients was  $34.3 \pm 4.3SD$ . We found pain scores significantly less in rotary system as compared to manual system at 8 hours ( $p = 0.000$ ), at 12 hours ( $p = 0.000$ ), at 24 hours ( $p = 0.000$ ) and at 48 hours ( $p = 0.000$ ). Majority of patients in rotary group had no to mild pain while majority of patients in manual system had moderate pain after 48 hours ( $p = 0.000$ ). Frequency of pain was no-mild 45.3%, moderate 4.7% and severe 0% in rotary group while 6.3% no-mild, 23.4% moderate and 20.3% severe pain in manual system.

#### **CONCLUSION**

Endodontic preparation is associated with less post operative pain in rotary system as compared to manual or conventional method. Further research is required on detail understanding of procedure at larger scale with high sample size.

**KEYWORDS**

Endodontic treatment; Rotary system; Manual system