**J West Bengal Univ Health Sci. 2021; 1(3):** **18-25**

**EFFECT OF BROMELAIN, RUTOSIDE AND TRYPSIN COMBINATION ON POSTOPERATIVE PAIN, SWELLING AND TRISMUS AFTER SURGICAL THIRD MOLAR EXTRACTION**

**Vishal1, Tanya Khaitan2**Description: Description: Description: C:\Users\admin\Desktop\20061.png**, Smriti Priya3, Dharmendra Kumar Sinha4,   
Chandan Kumar5**

**Author Information**

1. Department of Oral and Maxillofacial Surgery, Dental Institute, Rajendra Institute of Medical Sciences, Ranchi
2. Dept of Oral Medicine and Radiology, Dental Institute, Rajendra Institute of Medical Sciences, Jharkhand
3. Department of Orthodontics and Dentofacial Orthopedics, New Horizon Dental College and Research Institute, Chhattisgarh
4. Department of Prosthodontics, Crown & Bridge & Oral Implantology, Dental Institute, Rajendra Institute of Medical Sciences, Ranchi
5. Dept. of Dentistry Patliputra Medical College & Hospital, Dhanbad

email: tanyakhaitan@gmail.com



**ABSTRACT**

introduction: Surgical removal of mandibular third molar is one of the common minor surgical procedures in dentistry. Local inflammatory response due to the procedure results in severe postoperative complications such as pain, swelling and trismus in the patients. A prospective, intraindividual, randomized, double-blind, crossover study was done to evaluate role of bromelain 180 mg + rutoside 200mg + trypsin 96 mg (BRT) along with routine medicine in reducing such postoperative complications.

Material & Method: A total of 20 patients, age ranged from 20 to 35 years, requiring surgical extraction of both the mandibular third molars with a similar degree of difficulty were included in the study. Extraction of one quadrant followed the opposite quadrant in a gap of 4 to 6 weeks; BRT was added to standard medicine regime in the latter after extraction. Swelling, pain and trismus were evaluated on 3rd, 5th and 7th postoperative days.

Results: There was a statistically significant reduction in the extent of cheek swelling and mean pain intensity in VAS (visual analogue scale) in the BRT group when compared to the control group (p < 0.05). No significant reduction in trismus was observed for both the groups postoperatively (p > 0.05).

Conclusion: Amount of postoperative complications differ from patient to patient due to their unique body response to injury. BRT has shown significant results in reducing postoperative pain and swelling but efficiency in reducing trismus can’t be confirmed.

Keywords: Bromoline; Impaction; Inflammation; Rutoside; Trypsin.