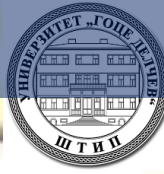


TREATMENT POSSIBILITIES AND POSTOPERATIVE COMPLICATIONS AT EXTRACAPSULAR FRACTURES OF THE MANDIBULAR CONDYLE

Bruno Nikolovski¹, Danica Popovic Monevska², Vera Radojkova Nikolovska², Mirjana Popovska², Vanco Spirov¹, Mirjana Markovska Arsovska¹, Biljana Evrosimovska³, Ana Gigovska³, Aneta Terzievska³, Irena Stojanova³



¹Faculty of medical sciences, Goce Delcev University, Stip, North Macedonia

²Faculty of dentistry, Ss. Cyril and Methodius University, Skopje, North Macedonia

³Department for oral surgery and implantology, University Dental Clinical Center St. Pantelejmon, Skopje, North Macedonia

Background:

Mandibular condylar fractures represent 25%–35% of all mandibular fractures. The treatment of mandibular condyle fractures remains controversial despite many studies regarding the subcondylar type of fracture.

Aim:

The aim of this study is to analyze the outcome and recovery rates after open and closed treatment of extracapsular mandibular condyle fractures, regarding postoperative malocclusion, mouth opening, wound healing, pain, and swelling.

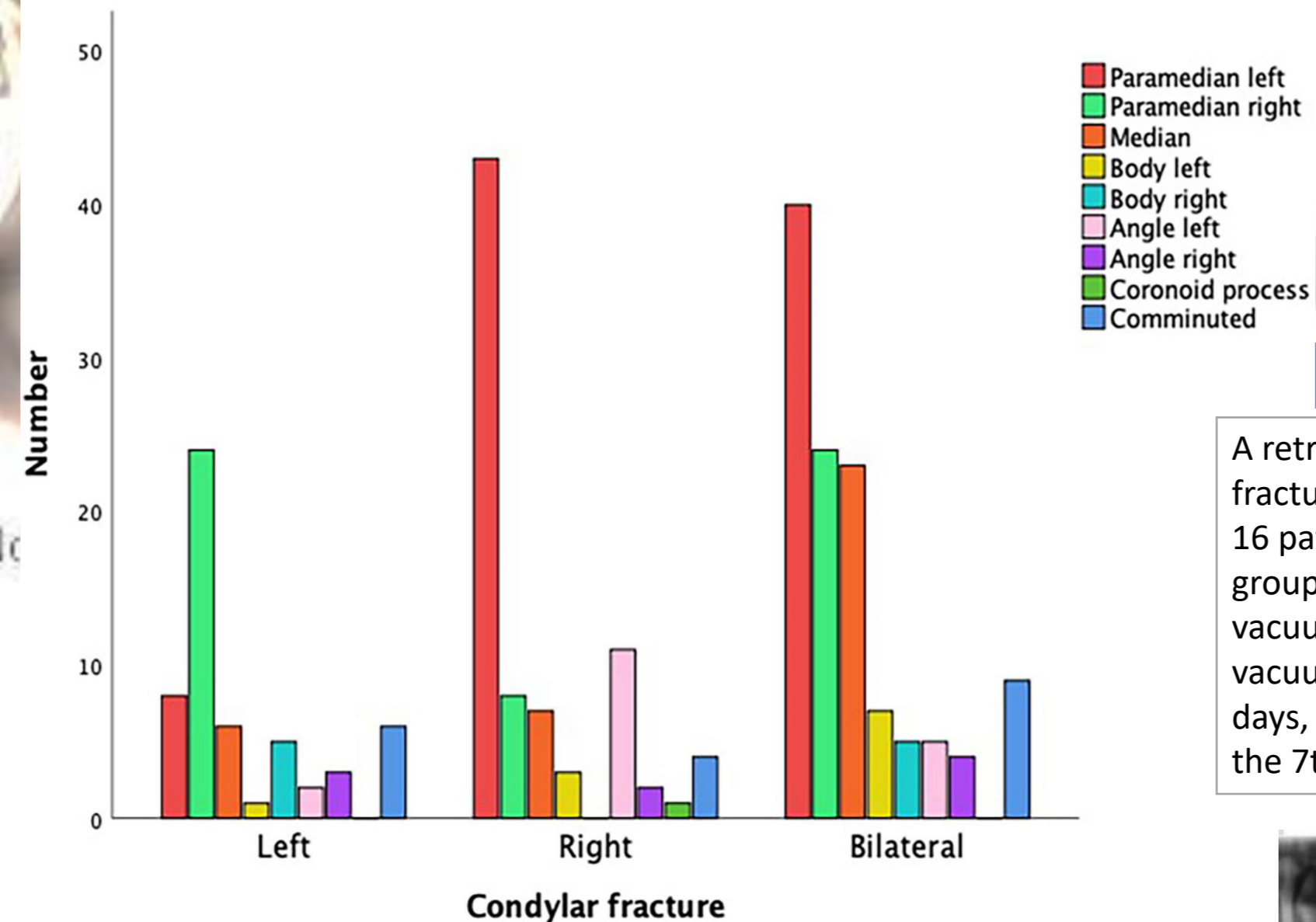
350 (92.8%) condylar fractures were treated by ORIF whereas 27 (7.2%) fractures underwent conservative treatment ($n = 27$). Among the closed treated fractures, type I was the most frequent type (63.0%, $n = 17$) Patients with bilateral condylar fractures show a significantly higher risk to develop dysocclusion ($p = .039$).

Results:

Post-therapeutic reduction of MMO was significantly cumulated in patients with bilateral fractures ($p < .001$) High condylar fractures were significantly associated with a reduced post-therapeutic MMO ($p = .030$).

Evaluation of the early postoperative sequels, showed significantly higher values in group B, while malocclusion was the most frequent long-term complication after open reduction and rigid intermaxillar fixation (ORIF).

Concomitant mandibular fractures



Material and Methods:

A retrospective cohort study based on 377 condylar fractures and prospective comparative study on a total of 16 patients were implemented, using two study groups – group A, consisted of 8 patients with placed closed vacuum drain, and 8 patients in group B, without closed vacuum drain, measured on 1st and 3rd postoperative days, whereas both the parameters were comparable on the 7th and 15th postoperative days.



Type I	Fractures without displacement
Type II	Low fractures with displacement
Type III	High fractures with displacement
Type IV	Low fractures with dislocation
Type V	High fractures with dislocation
Type VI	Intracapsular fractures

TABLE 1. Spiessl and Schroll classification.

Conclusions:

There was no statistically significant difference in the incidence of pain, mouth opening, swelling, and wound healing in patients with and without closed suction wound drainage after ORIF of condylar fractures. ORIF, using a retromandibular transparotid approach, is the appropriate treatment of choice for extracapsular condylar fractures of the mandible.