EFFICACY OF INTRAARTICULAR LEVOBUPIVACAINE COMBINED WITH MULTIMODAL ANALGESIA FOR POSTOPERATIVE PAIN FOLLOWING TEMPOROMANDIBULARJOINT ARTHROSCOPY

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BACKGROUND AND GOAL OF STUDY

Temporomandibular joint (TMJ) arthroscopy represents a form of **minimally invasive surgical treatment** in patients suffering from internal derangement of the TMJ

Uncontrolled postoperative pain relief is one of the main reasons for **prolonged hospitalization** and delay in early rehabilitation.

MULTIMODAL ANALGESIA provide potent and synergistic effects

The analgesic effect of **intraarticular levobupivacaine** in TMJ arthroscopy has not been studied yet.

We designed an **open arm study** to evaluate the efficacy and safety of intra- articular levobupivacaine combined with multimodal analgesia in the management of postoperative TMJ pain in a 24-hour period.

MATERIALS AND METHODS

This is a prospective, an open arm study, recruiting a cohort of 30 consecutive patients that underwent TMJ arthroscopy. The study was approved by the local Ethical Committee. All participants gave written informed consent in advance. Patients included were adults aged ≥18 years with **ASA 1-2**. Preoperatively, patients were instructed in the use of a 100 mm visual analogue scale (**VAS**) to measure pain. Patients with additional pathology and those with allergy to one of the study drugs, were excluded.

Data were analyzed using the **SPSS** for Windows software package.

RESULTS AND DISCUSSION

To date, a total of 15 patients were assessed.

VARIABLE	Results
Age (years)	41,27 (range 24-62)
Gender	2 male – 13 female
ASA	8 patients ASA I 7 patients ASA II
Anxiety	2 patients
Depressive syndrome	1 patient
Arthroscopy	9 patients Unilateral 6 patients Bilateral
Drugs consumed Table 1. Patient Characteristics	Antidepressants 3 patients Benzodiazepines 1 patient

The median pain scores at hour, 4, 6, and 24 were 3, 3, 4, 3 respectively after mandibular opening. Only 3 patients needed supplementary analgesia NSAIDS.

No nausea, vomiting or significant complications were reported. All patients were discharged from hospital 24 hours after surgery.

CONCLUSION:

Post-operative pain after surgical procedures may be exacerbated by inflammation, edema at the surgery site.

According to our preliminary results we could suggest that **intraarticular levobupivacaine** with **multimodal analgesia** is an effective analgesic treatment reducing perioperative opioid administration, but also decreasing the time between from the end of surgery to fluid intake, deambulation and diuresis, and also potentially reducing the length of hospital stay of patients less than 24 hours

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