**Title:** Surgical vs. Non-Surgical Management of Temporomandibular Joint Disorders: Clinical Outcomes.

**Author Name:** Mohammad K Alam, Mohammed E Rashid, Khaleda Akhter, Abedalla Abdelghani, Hamzah A Babkair, Mohammed G Sghaireen.

**Abstract: Background:** Temporomandibular joint disorders (TMDs) encompass a range of clinical conditions affecting the temporomandibular joint (TMJ) and associated structures. Management approaches for TMDs vary and include both surgical and non-surgical interventions.

**Materials and methods:** In this retrospective cohort study, medical records of 150 patients diagnosed with TMDs were reviewed. Patients were categorized into two groups: surgical intervention and non-surgical intervention. The surgical group underwent various surgical procedures, including arthroscopy, arthroplasty, and joint replacement, while the non-surgical group received conservative treatments such as physical therapy, pharmacotherapy, and occlusal splints. Pain levels, TMJ function, quality of life (QoL), and patient satisfaction were assessed at baseline and post-treatment (6 months and 1 year).

**Results:** At the 6-month follow-up, both groups experienced a significant reduction in pain scores (surgical group: 6.3 ± 1.2 to 2.4 ± 0.9, non-surgical group: 6.1 ± 1.1 to 3.2 ± 1.0). TMJ function improved in both groups (surgical group: 2.5 ± 0.8 to 4.8 ± 0.6, non-surgical group: 2.6 ± 0.7 to 4.2 ± 0.9). QoL scores increased (surgical group: 35.2 ± 4.6 to 50.3 ± 5.1, non-surgical group: 35.5 ± 4.2 to 45.7 ± 4.8), and patient satisfaction rates were high (surgical group: 92%, non-surgical group: 87%) at the 1-year follow-up.

**Conclusion:** Both surgical and non-surgical management approaches demonstrated significant improvements in pain relief, TMJ function, QoL, and patient satisfaction for individuals with TMDs.

**Keyword:** Clinical Outcomes, TMD, Non-Surgical Intervention, Patient Satisfaction, Surgical Intervention, Temporomandibular Joint Disorders.

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