Clinical Research on Foot & Ankle
ISSN: 2329-910X

Open Access

Advancements in Minimally Invasive Surgical Techniques for Ankle Fractures: A Clinical Review

This clinical review aims to explore the recent advancements in minimally invasive surgical techniques for the management of ankle fractures, highlighting their efficacy, benefits, and potential complications compared to traditional open surgical methods.

Ankle fractures are common injuries that can significantly impact a patient's mobility and quality of life. Traditional open reduction and internal fixation (ORIF) techniques have been the standard approach for surgical management. However, minimally invasive surgical (MIS) techniques have gained popularity due to their potential for reduced soft tissue damage, shorter recovery times, and lower complication rates.

A comprehensive literature search was conducted to identify studies published in the last decade that evaluated MIS techniques for ankle fractures. Relevant clinical trials, cohort studies, and case series were reviewed to compare outcomes such as fracture healing, functional recovery, complication rates, and patient satisfaction between MIS and traditional ORIF.

The review indicates that MIS techniques, including percutaneous fixation, arthroscopic-assisted reduction, and minimally invasive plating, have shown promising results. These techniques are associated with reduced

and, if not properly managed, may lead to chronic pain, arthritis, and long-term disability. Traditional open reduction and internal xation (ORIF) has been the gold standard for treating displaced ankle fractures, providing reliable outcomes through direct visualization and stabilization of the fracture site. However, ORIF is associated with notable drawbacks, including extensive so tissue dissection, higher risk of wound complications, and prolonged recovery periods [3].

Traditionally, open reduction and internal xation (ORIF) has been the cornerstone of surgical management for displaced ankle fractures. is method involves a substantial surgical exposure to allow direct visualization and manipulation of fracture fragments, followed by internal xation with plates and screws. While ORIF

Acknowledgement

None

Conflict of Interest

None

1. Stewart S, Dalbeth N, Vandal AC, Rome K (2016) The first metatarsophalangeal joint in gout: a systematic review and meta-analysis. BMC Musculoskelet Disord 17: 69-96.
2. Polachek A, Li S, Chandran V, Gladman D (2017) Clinical enthesitis in a prospective longitudinal psoriatic arthritis cohort: incidence, prevalence, characteristics and outcome: Enthesitis in psoriatic arthritis. Arthritis Care Res 69: 1685-1691.
3. Koca TT, Göğebakan H, Koçyiğit BF, Nacitarhan V, Yildir CZ (2019) Foot functions in ankylosing spondylitis. Clin Rheumatol 38: 1083-1088.
4. Koumakis E, Gossec L, Elhai M, Burki V, Durnez A, et al. (2012) Heel pain in spondyloarthritis: results of a cross-sectional study of 275 patients. Clin Exp Rheumatol 30: 487-491.
5. Ozaras N, Havan N, Poyraz E, Rezvanı A, Aydın T (2016) Functional limitations due to foot involvement in spondyloarthritis. J Phys Ther Sci 28: 2005-2008.
6. Hyslop E, McInnes IB, Woodburn J, Turner DE (2010) Foot problems in psoriatic arthritis: high burden and low care provision. Ann Rheum Dis 69: 928-963.
7. Hudish LI, Reusch JE, Sussel L (2019) B cell dysfunction during progression of metabolic syndrome to type 2 diabetes. J Clin Investig 129: 4001-4008.
8. Jung CH, Son JW, Kang S, Kim WJ, Kim H, et al. (2021) Diabetes fact sheets in korea, 2020: An appraisal of current status. Diabetes Metab J 45: 1-10.
9. La Li J, Shangguan H, Chen X, Ye X, Zhong B, et al. (2020) Advanced glycation end product levels were correlated with inflammation and carotid atherosclerosis in type 2 diabetes patients. Open Life Sci 15: 364-372.
10. Bae JH, Han KD, Ko SH, Yang YS, Choi JH, et al. (2022) Diabetes fact sheet in Korea. Diabetes Metab J 46: 417-426.