

FULL TEXT LINKS



[Foot Ankle Surg.](#) 2021 Oct;27(7):742-749. doi: 10.1016/j.fas.2020.09.010. Epub 2020 Sep 29.

# Minimally invasive treatment of AO B ankle fractures: Surgical technique and long-term outcomes

[Juan Manuel Yañez Arauz](#) <sup>1</sup>

Affiliations

PMID: 33097404 DOI: [10.1016/j.fas.2020.09.010](#)

## Abstract

**Background:** Ankle fractures are the most common traumatic bone injuries of the lower limb. Over 50% of ankle fractures occur at the syndesmosis level (type AO B). The goal of treatment is to achieve an anatomical reduction and appropriate stabilization. The present study aimed to evaluate the clinical-functional and radiological results, and complications of minimally invasive reduction and fixation technique for ankle fractures type AO B. The surgical technique also is detailed.

**Material and methods:** A prospective analysis of 451 patients undergoing surgery for type AO B displaced ankle fracture was performed. All patients were treated with minimally invasive surgery. The

following times were recorded: time between trauma and osteosynthesis, hospitalization length, surgical time, and exposure time to fluoroscopy. Age and gender, mechanism of injury, and characteristics of fractures were recorded. For functional outcome, AOFAS score, VAS, and Weber score were used. Radiographic analysis was performed. The average follow-up was 112 months.

**Results:** Mean age was 48.2 years old. Average length of stay in hospital was 5.72 h. Mean duration of the surgery was 32.8 min. Average fluoroscopic exposure time during surgery was 9.25 s. Mean bone union time was 38.2 days. Weber's score was on average 1.5/24 points and the long-term follow-up AOFAS score was on average 97.5/100. Postoperative complications incidence was 2.7%.

**Conclusions:** Distal fibula fixation with the MIPO technique presented good functional outcomes and could be helpful in the avoidance of the complications associated with conventional open reduction and internal fixation. However, it needs more exposition to intraoperative fluoroscopy.

**Level of evidence:** II.

**Keywords:** Ankle fractures; Fibula; MIPO; Minimally invasive surgery.

Copyright © 2020 European Foot and Ankle Society. Published by Elsevier Ltd. All rights reserved.

## Comment in

[Minimally invasive treatment of AO B ankle fractures: Surgical technique and long-term outcomes.](#)

Uzun M, Erdemir GA.

Foot Ankle Surg. 2021 Jun;27(4):463. doi: 10.1016/j.fas.2020.10.008. Epub 2020 Dec 29.

PMID: 33390316 No abstract available.

## Related information

[MedGen](#)

## LinkOut - more resources

### Full Text Sources

[ClinicalKey](#)

[Elsevier Science](#)

### Medical

[MedlinePlus Health Information](#)

### Research Materials

[NCI CPTC Antibody Characterization Program](#)