

POSTER 6

FUNCTIONAL OUTCOMES OF PATIENTS UNDERGOING ANTEROLATERAL VERSUS ANTEROMEDIAL APPROACHES OF THE ANKLE FOR PILON FRACTURES

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Introduction:

Pilon fractures of the distal tibia remain a treatment challenge to orthopedists. Careful preoperative planning is crucial to achieving desirable clinical outcomes, but currently the literature does not reach a consensus on which surgical approach is optimal. This study examines functional outcomes of two of the most common surgical approaches for pilon fractures, the traditional anteromedial approach and the more recently described anterolateral approach. The anterolateral approach is thought to produce better outcomes because of the greater amount of visualization into the articular surface and greater soft tissue coverage for the implant.

Materials and Methods:

82 potential subjects were identified to have been treated for Pilon fractures between August 2005 and July 2009 at a level 1 trauma center. Of these patients 39 agreed to be subjects in our study and were asked to fill out the Musculoskeletal Functional Assessment (MFA) and Foot Function Index (FFI) by a telephone interview. This data was then analyzed according to guidelines for each survey. Both scales are assessed on a 0-100 scale with 100 being maximum dysfunction and 0 being minimum dysfunction.

Results:

	AL (23)	AM (14)	AM & AL (2)
Total MFA Score	35.26	32.64	40
FFI Total Score	45.56	42.13	57.15
Time From Surgery to Survey (Days)	1197.09	1293.64	1223
Average Fracture Classification	C2-C3	B3-C1	C2-C3

Conclusion:

The outcomes of the two different approaches did not produce a statistically different outcome (p-values of .9270 for MFA comparison and .9170 for FFI comparison). Yet the significantly higher fracture classification of the anterolateral approach patients (C2-C3 compared to B3-C1) should have produced worse clinical outcomes. Therefore we conclude that the anterolateral approach produces favorable long-term functional outcomes of patients with pilon fractures.