

Midfoot Charcot Arthropathy: Current Surgical Management. A Systematic Review

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Introduction:

Charcot arthropathy is a progressive, non-infectious, destructive, and debilitating condition that affect the foot and ankle region with midfoot being the most commonly affected part. There is insufficient data available in regard to reconstruction method in midfoot Charcot Arthropathy, including the outcomes and complications. Therefore, present study is to evaluate the occurrence of common outcomes associated with each intervention of Charcot Arthropathy in midfoot.

Methods:

All data published from January 2010 to January 2020 that investigated the methods of fixation and their respective outcomes for the surgical reconstruction in Charcot neuroarthropathy were analysed. The union rate, amputation rates, and complications associated with these techniques were taken for statistical analysis.

Results:

A total of nine studies fulfils the inclusion criteria, with one Level-III studies and eight Level-IV studies were included. Six studies utilized midfoot bolt two applied external device and one study used plate as tool for reconstruction.

Conclusions:

In conclusion, we suggest that soft tissue preparation is utmost important with application of an additional screw or plate and even external fixator with midfoot bolt will reduce the risk of infection, increase rigidity of construct, and hence achieving union. A higher rate of construct failure was noted when isolated implant was applied.

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