



CASE STUDY  
CHARCOT ARTHROPATHY



# REVOLUTION EXTERNAL PLATING SYSTEM | CHARCOT ARTHROPATHY CASE STUDY

Caution: Federal law (USA) restricts this device to sale by or on the order of a physician. Proper surgical procedure is the responsibility of the medical professional.

## PATIENT INFORMATION

AGE	47
GENDER	Male
GENERAL HEALTH	Good

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## PRE-OPERATIVE PHOTOS



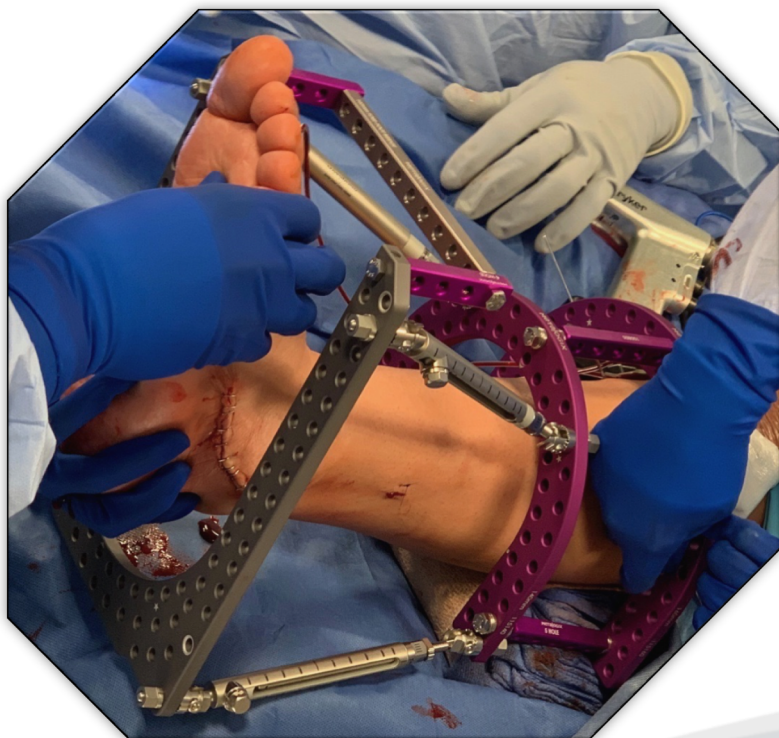
## PATIENT TREATMENT

INDICATION	Charcot Arthropathy**
CAUSE	Severe degeneration and dislocation of the rearfoot ankle
STRATEGY	Charcot Reconstruction with Static Frame Fixation
SURGERY DATE	06/07/2019



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### SURGERY DETAILS

A pre-assembled frame was constructed prior to surgery. The tibial block had a 160mm n-Plate funneling down to a 140mm n-Plate all connected by three (3) 5-Hole Posts. The block had four (4) Long Super Struts connecting to a 140mm Footplate. The Footplate had a Bridge to close it off. The Bridge consisted of 4-Hole Posts and a 140mm Fore-Foot Bridge.



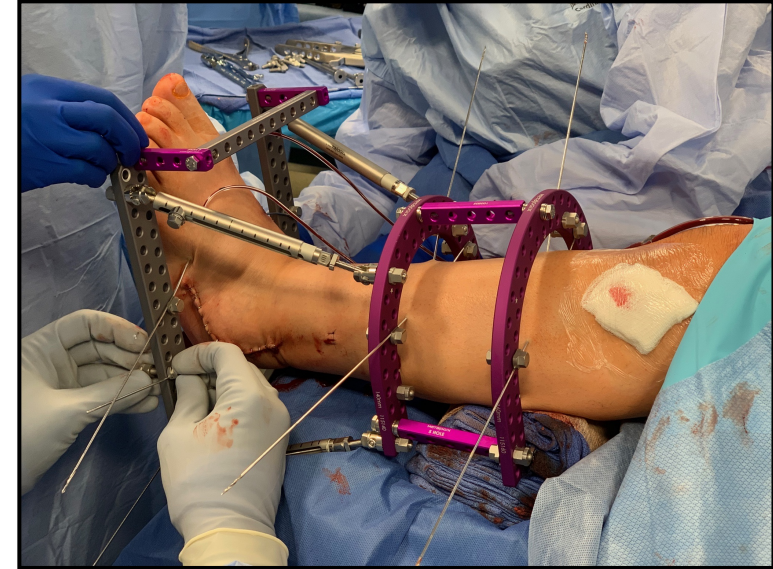


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The first two (2) wires were inserted through the tibia to the proximal tibial block.\* The second two (2) wires were placed through the foot.



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Remaining wires\* were inserted through the distal tibia and attached to the distal n-Plate, creating a very stable frame construct.

*\* All wires were attached with wire fixation bolts and spherical nuts.*

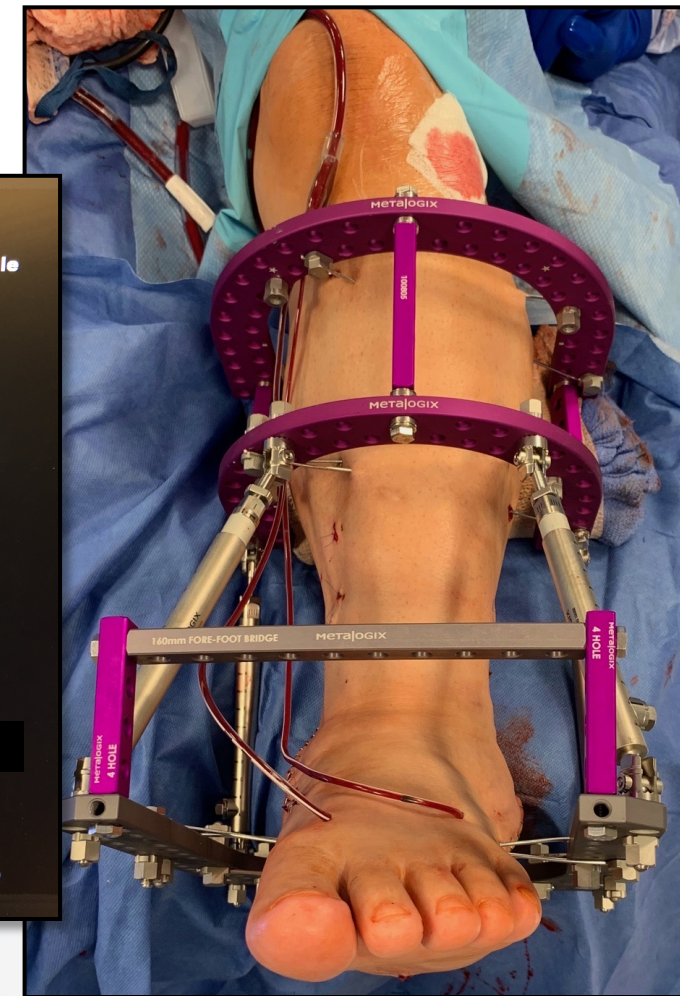
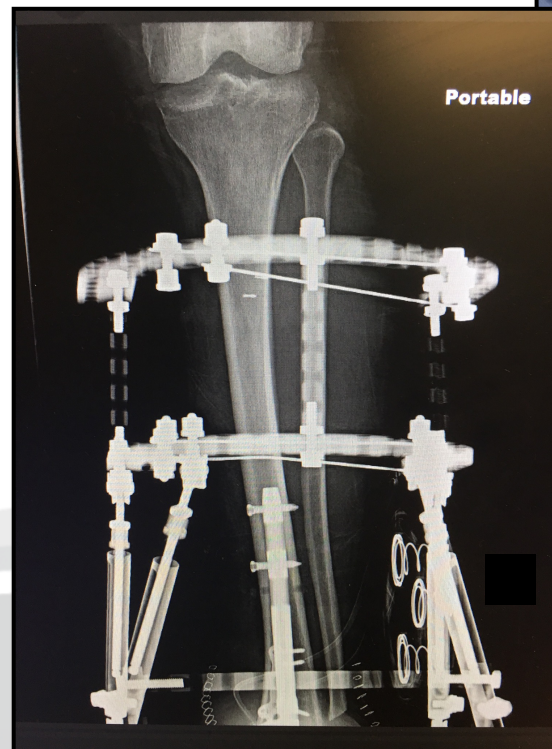


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The surgical application of the Revolution Frame was straight-forward and successful. The open posterior plates allow for easy placement of the frame.

*\*\* Also called Charcot joint or neuropathic joint, Charcot arthropathy is a progressive condition of the musculoskeletal system that is characterized by joint dislocations, pathologic fractures and debilitating deformities. Syphilis was believed to be the most common cause of Charcot arthropathy until 1936, when Jordan linked the indication to diabetes. [1, 2] Diabetes is now considered to be the most common etiology of Charcot arthropathy.*

*Charcot arthropathy results in progressive destruction of bone and soft tissues at weight-bearing joints. In its most severe form, it may cause significant disruption of the bony architecture. Charcot arthropathy can occur at any joint; however, it occurs most commonly in the lower extremity, at the foot and ankle.*





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### POST-OPERATIVE

Frame was removed without issue on 08/08/2019. Patient is doing great and all fusion sites have healed.



*Metalogix thanks Richard Derner, DPM, FACFAS, Past President, American College of Foot and Ankle Surgeons Program Director, Inova Fairfax Medical Campus, for participating in this case study.*