

## P9

### **The importance of a good blood supply in development of Charcot Neuro-arthropathy: Charcot neuro-arthropathy following bypass surgery in both limbs.**

Baker NR, Green AQ, Rayman G.

Ipswich Diabetic Foot Unit, Ipswich Hospital, Suffolk, United Kingdom

A 61-year-old lady presented with an ulcer of the plantar surface of the right first metatarsal head associated with right leg claudication. Her long history of type 1 diabetes was complicated by neuropathy, retinopathy, nephropathy and peripheral vascular disease. A femoral angiogram revealed significant stenoses in the right superficial femoral and the distal popliteal arteries. This was initially treated with a femoral angioplasty but unfortunately the ulcer and claudication re-occurred and was ultimately treated definitively with a right femoro-distal popliteal bypass. Both the ulcer and claudication resolved uneventfully. Two years subsequent to this the patient developed a hot painful right foot. A plain radiograph of the foot showed a fracture of the medial cuneiform and separation of the 1<sup>st</sup> and 2<sup>nd</sup> metatarsals characteristic of Lisfranc ligament rupture. A diagnosis of Charcot neuro-arthropathy (CN) was made and the foot was immobilised for 8 months; despite this, her right mid-foot collapsed causing the typical deformity of CN.

Later that year the patient developed a new non- infected ulcer on the heel of the other (left) foot. A femoral angiogram demonstrated multiple superficial femoral artery stenoses, which were treated with a left fem-distal bypass. Eight weeks post operatively she presented with left mid-foot pain. A foot x-ray demonstrated fractures at the bases of the 2<sup>nd</sup> and 3<sup>rd</sup> metatarsals. A diagnosis of CN was made and the foot immobilised. Again despite prompt treatment she developed the mid-foot deformity characteristic of CN. This lady had all the pre-requisites for CN except a good blood supply: when the latter was restored CN ensued. Was ischaemia protective?