

**Fig. 4.** Patterns of diabetic osteoarthropathy based on anatomic sites of involvement. (From: Sanders LJ, Frykberg RG. Diabetic neuropathic osteoarthropathy: the Charcot foot, in *The High Risk Foot in Diabetes Mellitus* (Frykberg RG, ed.), Churchill Livingstone, New York, 1991, pp. 297-338. Used with permission.)

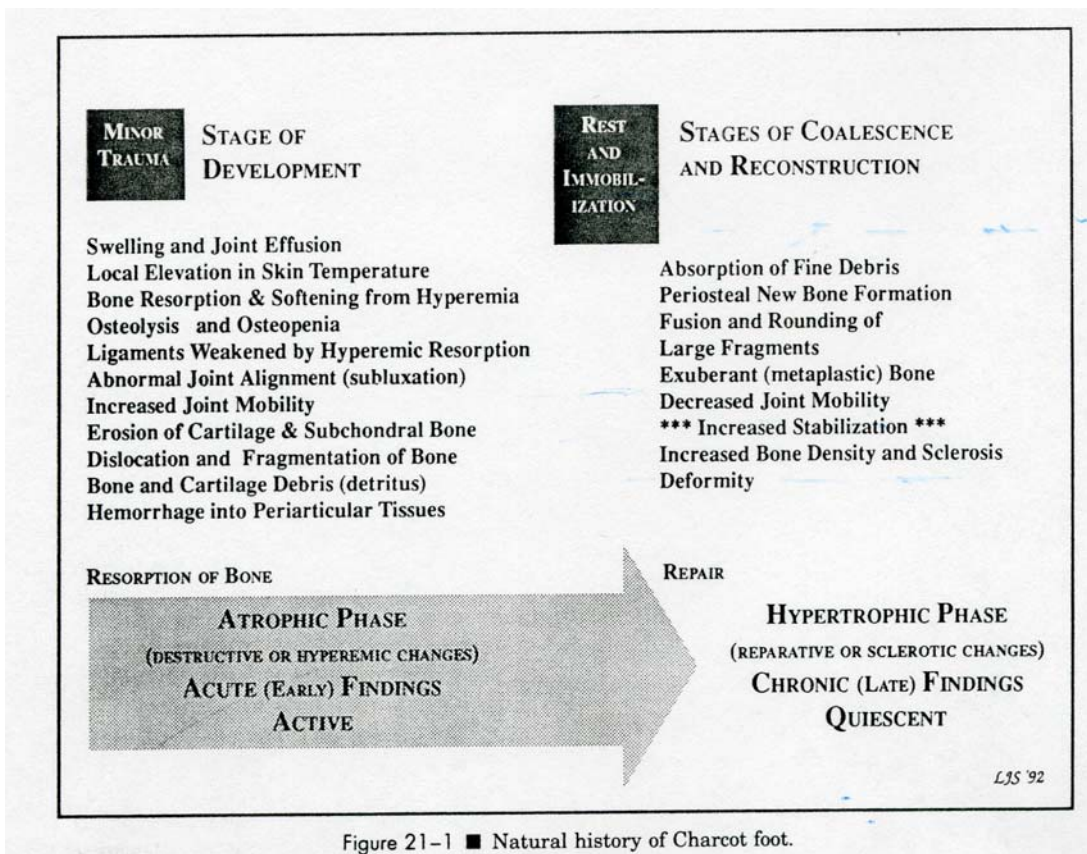


Figure 21-1 ■ Natural history of Charcot foot.

**Table 17.2** Clinical findings in acute neuro-arthropathic feet

Neuropathic	Vascular	Cutaneous	Structural
Absent or diminished Pain	Bounding pulses	Ulceration	Rocker bottom deformity
Vibration	Oedema	Infection	Medial tarsal prominences
Proprioception	Erythema	Hyperkeratoses	Ankle deformity
Light touch	Warmth		Hypermobility
Reflexes			Crepitus
Anhidrosis	Autonomic Microcirculatory disturbances	Dry skin	Digital subluxation

\*Certain findings will be related specifically to site of involvement or degree of deformity and might not always be present.

**Table 17.3** Radiographic findings in diabetic neuro-arthropathy

Stage	Atrophic	Hypertrophic	Miscellaneous
Acute	Phalangeal "hour-glassing"	Osteochondrial fragmentation	Soft tissue oedema
	Metatarsal head osteolysis "sucked candy, pencil-pointing"	Intra-articular debris	Joint effusions
	Mortar and pestle deformities		Fractures
Quiescent	Aggressive osteolysis in rearfoot		Subluxations
	Osteopenia	Marginal osteophytes	Medial calcification
	Bone loss	Periosteal new bone	Deformity
	Osteopenia	Absorption of debris	Reduced swelling
		Ankylosis/fusion	Subchondrial sclerosis
		Healed fractures with abundant bone callus	

Modified from Table 2 in Frykberg RG, Kozak GP: Neuropathic Arthropathy in the diabetic foot. *Am Fam Physician* 1978; 17: 105-113.

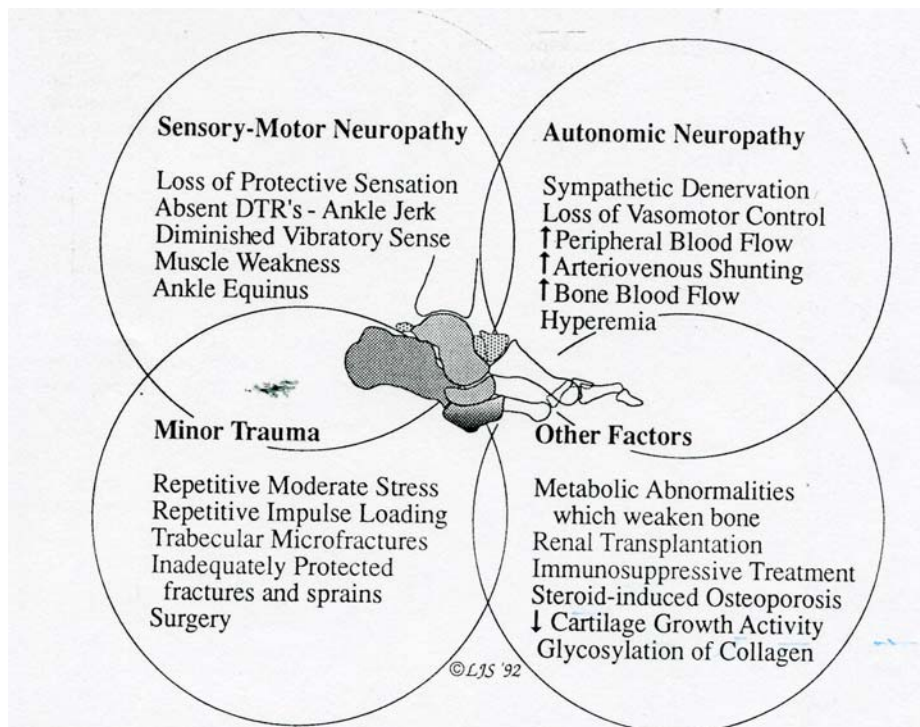


Figure 21-2 ■ Pathogenesis of Charcot foot. (Modified from Sanders LJ, Frykberg RG: Diabetic neuropathic osteoarthropathy: The Charcot foot. In Frykberg RG [ed]: *The High Risk Foot in Diabetes Mellitus*. New York: Churchill Livingstone, 1991, with permission.)