(*Refer to page 188*)

Answer: Charcot foot

Charcot foot is defined as a non-infectious and progressive deformity of a foot joint that is characterised by painless joint dislocation, pathologic fractures and severe destruction of the pedal architecture that is closely associated with peripheral neuropathy. [1]

Charcot joint or arthropathy was first described by William Musgrave, a British physician in 1703 as a neuropathic joint in association with venereal disease. However it was Jean-Martin Charcot, a French eminent physician who in 1868 gave the first detailed description of this condition which now bears his name. [1] Syphilis was believed to be the most common cause until 1936 and diabetes mellitus is now the most common cause of Charcot joints.

Charcot foot is reported to occurs between 0.3% and 0.5% of patients with underlying diabetes mellitus. It is often associated with advanced peripheral neuropathy. [2] Bilateral involvement is reported to occur between 5.9% and 39.3%. Charcot foot can be classified as acute or chronic on the basis of sudden onset, speed of development and progression.

Although the exact pathogenesis is not known, various theories have been proposed out of which the neuro-traumatic (German) theory and neurovascular (French) theory are accepted theories.

The disease process can be divided into three radiographically distinct stages : development, coalescence and reconstruction. Five patterns of joint involvement have been described. [2] In majority of the cases, the diagnosis of Charcot foot can be confirm with plain radiography, but at times specialised investigations like magnetic resonance imaging or technetium bone scan may be required.

Charcot foot can be misdiagnosed as cellulitis and therefore a high index of suspicion is necessary. The earliest manifestation of Charcot foot is swelling of affected foot. Examination often reveals warm, swollen and insensate foot.

The management of Charcot foot is difficult. The treatment offered to patients is usually long term immobilisation in a total contact cast. Surgical treatment is indicated in instability, deformity, chronic ulceration and progressive joint destruction.

REFERENCES

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