

[P19] CHARCOT FOOT ATTACKS IN A NON-TRANSPLANTED DIABETES MELLITUS POPULATION: THE IMPORTANCE OF CORTICOSTEROIDS AS A CAUSATIVE FACTOR

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Aim: Diabetes mellitus is nowadays the leading cause of Charcot neuroarthropathy. Polyneuropathy seems to be a prerequisite. The onset is frequently preceded by a trauma, though this cannot always be recalled by the patient. In a study on diabetes type 1 patients undergoing a simultaneous pancreas-kidney transplantation, a significant higher rate of Charcot neuroarthropathy attacks post-transplantation was observed that was positively correlated to the cumulative dose of used corticosteroids. The aim of this study was to retrospectively investigate the correlation between the use of corticosteroids and the development of a Charcot neuroarthropathy in a non-transplanted diabetes population

Method: Patients were included when treated or counselled in our interdisciplinary diabetic foot clinic from January 1, 2004, until December 31, 2015. Based on the Belgian IKED registration diabetes patients with a Charcot foot were individualized. The diagnosis of Charcot neuroarthropathy was checked based on the patients' medical records. Subsequently, all patients that underwent a transplantation in the past were excluded. For all remaining patients their medical records were checked for the use of corticosteroids prior to the development of the Charcot foot.

Results/Discussion: According to the IKED registration, a total of 100 diabetes patients with a Charcot foot was retrieved. Of these 100 patients, seven patients were excluded because they were transplanted in the past and eight other patients were excluded because they were misdiagnosed as a Charcot foot. Another nine patients were excluded because insufficient information about the use of corticosteroids was found in the medical records. A total of 76 patients with a Charcot foot and with sufficient information about corticosteroid use was analyzed. Out of these 76 patient, 39 patients (51%) had a confirmed diagnosis of a Charcot neuroarthropathy and the date of onset was known. In 26 patients (34%) the exact onset of the Charcot neuroarthropathy attack could not be determined, or a strong suspicion for a Charcot neuroarthropathy was present but without radiological evidence. In eleven patients (14.5%) the available information was based on only one visit in our clinic rendering it sometimes difficult to confirm the diagnosis. Out of these 76 patients with a Charcot foot, eight (10.5%) had a history of corticosteroids use prior to the development of their Charcot foot. Unfortunately, no cumulative corticoid dose could be calculated.

Conclusion: Since 68 out of 76 diabetes patients (89.5%) developed a Charcot neuroarthropathy without the evidence of the use of corticosteroids in the past, the use of any corticosteroids seems not to be a prerequisite for the development of a Charcot foot. However, a major limitation of this retrospective study was the difficulty to retrieve sufficient and correct information using the IKED registration forms and the medical records.