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## 6. CLINICAL CHARACTERISTICS OF SPONDYLARTHROSIS WITH AND WITHOUT PERIPHERAL ENTHESITIS – DATA FROM THE DESIR COHORT

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**Objectives:** Peripheral enthesitis, mostly in the lower limbs, is a major feature of spondyloarthritis (SpA). Its prevalence is highly variable depending on the population studied, estimated between 10% and 70%. The probability to develop a peripheral enthesitis over time and the factors associated with it are mostly unknown. The aims of the present study were : 1) To describe the prevalence and characteristics of peripheral enthesitis in early axial SpA population, at the inclusion in the DESIR cohort; 2) to estimate the incidence of peripheral enthesitis over time; 3) to determine the factors associated with the presence of peripheral enthesitis.

**Method:** We used data from the DESIR cohort, a prospective multi-center, longitudinal French cohort of 708 patients with inflammatory back pain suggestive of early axial SpA (<3 years since axial symptoms onset). We performed a descriptive analysis to evaluate the prevalence and characteristics of the peripheral enthesitis at time of inclusion (location, number of enthesitis, and mean time between first enthesitis and axial symptoms). We also estimated the incidence of peripheral enthesitis over a follow up period of 60 months, using Kaplan-Meier curves. Finally, we determined the baseline characteristics associated with the presence of a peripheral enthesitis by multivariable analysis (logistic regression, including the variables significantly associated in the univariable analysis).

**Results:** At inclusion, 395 patients (55.8%) had peripheral enthesitis in their past medical history. The locations were mainly the plantar fascia (212/395, 53.7%) and the Achilles tendon (152/395, 38.5%). Seventy-seven (19.4%) of these patients developed peripheral enthesitis before their axial symptoms, with a mean time interval of 773 days. During the 5-year follow-up period, 109/708 (15.4%) patients developed new peripheral enthesitic symptoms, resulting in 504/708 (71.2%) patients who had presented with at least one episode of peripheral enthesitis at 5 years. Variables associated to peripheral enthesitis according to the univariable analysis were: older age, male gender, HLA B27 positivity, MRI sacroiliitis, Modified NY criteria fulfilled, presence of either anterior chest wall pain, peripheral arthritis, dactylitis or psoriasis, high BASDAI, BASFI or mean score ASAS-NSAID. Only the history of anterior chest wall pain and of peripheral arthritis were significantly and independently associated with the presence of peripheral enthesitis in the multivariable analysis (Odds Ratio (OR) = 1.6 [95% Confidence interval (1.6 [1.1-2.3], and OR= 2.1 [1.4-3.0], respectively)

**Conclusion:** This prospective study highlights the high prevalence of peripheral enthesitis in early axial SpA and stresses the importance of researching any signs and symptoms of enthesitis, especially in those patients with anterior chest wall pain and peripheral arthritis.