Evaluation of structural damage of the spine, sacroiliacs and the hip in Tunisian Spondyloarthrities patients with hip involvement

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Introduction: Coxitis is a spondyloarthritis(SpA) serious complication. Indeed, its outcome on young and active ground alters both functional prognosis and life quality.
The objective of this study was to evaluate structural damage of the spine, sacroiliacs, and the hip, Tunisian Spondyloarthrities patients with hip involvement

Methods: This is a transversal study, including SpA patients (satisfying ASAS criteria 2009) with hip involvement. Demographic and clinical data were collected and analyzed. Structural sacroiliacs and hip evaluation was made using X-ray of the pelvis and BASRI hip. Radiographic forms of hip disease were evaluated. Sacroiliac involvement was assessed using the Forestier classification. The structural damage of the spine was evaluated on face and profile radiographs of the cervical and lumbar spine. Two scores have been used: BASRI score (Bath Ankylosing Spondylitis Radiologic Index), and mSASSS (modified stoke Ankylosing Spine Score).

Patients	94
Sexe-ratio	0,81
Mean age (years)	41,53 ±11,97
Median age at disease onset (years)	26,23±10,29
Mean diagnostic delay (years)	6,48
Median BASDAI	5,4
Median BASFI	5,5

- peripheral joint involvement was found in 33% of cases. Extra-articular manifestation was seen in 57% of patients

- Sacroiliitis grade was 2 in 17%, 3 in 37% and 4 in 46% of cases. 147 hips were evaluated
- 78 patients had bilateral hip involvement. 147 hips were evaluated.
- Mean BASRI-hip score was 2,07.

m SASSS	score
Cervical spine	7,51
Lumbar spine	8,73
total	15,34

Discussion : BASRI,SASSS, and m-SASSS were developed that were tested for reliability in quantifying structural damage [1-2]. BASRI includes cervical and lumbar spine as well as sacroiliac joints. Similar scoring is available also for hips. These scoring methods are those that are mostly used in clinical and observational studies [3]. SASSS is a scoring system that evaluates only cervical spine, whereas M-SASSS evaluates both lumbar and cervical spines. In a 4-year follow-up study on 217 patients with AS, Wanders et al. [4] investigated which method is the most appropriate in evaluating progression. For that purpose, they performed radiographic evaluation using BASRI, SASSS, and M-SASSS on radiographs taken at year 0, 1, 2, 3, and 4. According to the result of this study, they concluded that M-SASSS was the best radiological method in determining progression

Conclusion: Our findings confirm tunisian observations that studied Spa with hip involvement. This population had a particularly severe structural damage of the spine.

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