inhibitors (certolizumab pegol) were received by 4 women (7.3%), while the need for INF-γ was in 13 patients (not received due to medicine unavailability).

In women who retained lactation, the severity of back pain was: 3.0 [2.0; 6.0], 3.0 [2.0; 5.0] and 3.0 [2.0; 5.0] according to NRS, respectively. BASDAI activity was 2.3 [1.0; 4.2], 2.1 [1.4; 4.1] and 2.2 [1.6; 2.8], respectively. Activity on ASDAScrp was 1.9 [1.2; 2.7], 1.6 [1.4; 2.6] and 1.6 [1.3; 1.7], respectively. CRP level was 3.4 [1.9; 6.2], 4.5 [2.0; 12.5] and 2.0 [0.8; 5.6], respectively. The percentage of back pain, BASDAI and ASDAS values of CRP did not differ in women with and without lactation.

Women with high AS activity (BASDAI>4) maintained lactation at 1.6 and 12 months after delivery in 84.6%, 50% and 8.3%, respectively; while patients with low activity did it in 93.6%, 66.7% and 51.6%, respectively (p < 0.05 12 months after delivery).

Conclusion: The vast majority of women with AS are set up for lactation. High AS activity becomes a risk factor for termination of lactation more than 6 months after delivery. It is necessary to conduct training for obstetricians-gynecologists and pediatricians on issues related to medicine capabilities during lactation, in order to exclude unjustified cancellation of medicines compatible with breastfeeding.

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A SOLUTION PROPOSAL TO THE INTRA OBSERVER DISAGREEMENT PROBLEM IN THE EVALUATION OF SACROILIAC JOINT RADIOGRAPHY: "IMAGE PROCESSING METHOD"  
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Background: Ankylosing spondylitis (AS) is a rheumatological disease that causes low back pain. The diagnosis of ankylosing spondylitis is delayed for an average of 8 years due to the insidious course of the disease. Late diagnosis of AS can cause functional and physical disabilities. Radiographic sacroiliitis can be graded in the range of 0-4 and these classes may not be sharply separated from each other. Interpretation of the sacroiliac joint radiography may differ from physician to physician. In fact, the same physician may interpret it differently at different times (1). The reason for such confusion is the presence of blur or illumination and contrast problems leading to difficulties to detect pathological areas.

This paper has developed a simple image processing technique that adjusts the contrast of such images by modifying their intensity distribution using the histogram information. This transformation gives a linear trend to the cumulative probability function associated with the image and makes the images better for human vision. The common characteristic of low contrast images is the concentration of the histogram values of the image intensity near a narrow range (2).

Objectives: Changing the contrast range into a wider range changes the image value distribution that leads to better image vision.

Methods: Rheumatologist scored 260 x-ray scans grade 0 to 4. One day later, the same rheumatologist scored again the same scans randomly. It has been noticed that most of the answers were closed to the first-day decision but not all of them. We processed all the x-ray images with histogram equalization. Then the rheumatologist scored the scans randomly and answered two times in two consecutive days. To compare the agreement in radiography interpretation Kappa test was used. We used IBM SPSS 21 for the statistical analysis (kappa test) and Matlab R2019a for the image processing part.

Results: Severe improvement before and after the image processing application by increasing the Kappa value from 0.55 (p<0.001) [moderate agreement] to 0.71 (p<0.001) [substantial agreement] which is a substantial agreement.

Conclusion: Multidisciplinary approach can be helpful in solving the intraobserver disagreement problem. The use of image processing techniques can be used for the benefit of the patient in radiographs whose standardization is difficult due to multifactorial reasons. The histogram equalization method was found to be statistically significant in finding the optimum contrast for interpreting the sacroiliac joint radiography. The output of this work indicates and motivates our team into deeper research and more analyses on how to further improve our results.

A SOLUTION PROPOSAL TO THE INTRA-OBSERVER DISAGREEMENT PROBLEM IN THE EVALUATION OF SACROILIAC JOINT RADIOGRAPHY: “IMAGE PROCESSING METHOD”

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KEEP AN EYE ON THE BACK: SPONDYLOARTHRITIS IN PATIENTS WITH ACUTE ANTERIOR UVEITIS

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Background: Patients with acute anterior uveitis (AAU) have an increased risk for concomitant spondyloarthritis (SpA). Different referral strategies have been proposed to identify AAU patients with high probability of SpA, among them an Assessment of SpondyloArthritis international Society (ASAS)-based referral strategy focusing on patients with chronic back pain starting before the age of 45 years and the Dublin Uveitis Evaluation Tool (DUEET) also including psoriasis.

Methods: Patients with non-infectious AAU underwent structured rheumatologic assessment including magnetic resonance imaging of sacroiliac joints allowing a definitive diagnosis/exclusion of concomitant SpA. Fisher’s exact test and Mann–Whitney U test were used to compare AAU patients with and without SpA. Furthermore, logistic regression analyses were performed. Sensitivity, specificity, positive predictive value, positive and negative likelihood ratios were analysed for referral strategies.

Results: The 189 AAU patients with complete rheumatologic assessment and SI imaging were 40.8 years old, and 55% were males. SpA was diagnosed in 106 AAU patients (56%). The majority (93%) had predominantly axial SpA. 7 patients peripheral SpA. In 74 patients (70%), the SpA diagnosis was established for the first time. Pelvic X-rays were available for 88 (89%) of the axSpA patients, 66% of whom were classified as having radiographic axSpA. SpA was equally frequent in patients experiencing the first episode of AAU and in patients with recurrent disease. In our cohort, AAU patients with and without underlying SpA showed no differences in their ophthalmologic examination. In multivariable logistic regression analysis, psoriasis (OR 12.5 [95% CI 1.3-120.2]) HLA-B27 positivity (OR 6.3 [95% CI 2.4-16.4]), elevated CRP (OR 4.8 [95% CI 1.9-12.4]) and male sex (OR 2.1 [95% CI 1.1-4.2]) were associated with SpA presence.

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