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RATING AND STUDY THE EFFECT OF SPONDYLOARTHROPATHIES FOR CHILDREN.

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Abstract:

50 This paper aims to rate and study the effect of Spondyloarthropathies for children and were collected from different hospitals in Iraq in the analysis of spondyloarthritis in children in Iraq, and the patients were distributed to 35 boys and 15 girls.

Two criteria were used: ILAR and AMOR, and the statistical value to the average age of patients according to the ILAR criterion was 6.9 ± 2.2 and the AMOR criterion 8.9 ± 3.1. As for the distribution of patients by gender (20 patients were boys and eight girls) according to the ILAR criterion, and the patients were distributed according to the AMOR criterion (15 patients were boys and seven girls).

In this study, the diagnosis was based on MRI. Acute sacroiliitis was found in 18 patients, and inflammation of sacroiliac joints came in second place for 12 patients.

Sacroiliitis is inflammation of the sacroiliac joints located in the back of the pelvis. It is rare in childhood and most common five to 10 years after the onset of the arthritis.

Keywords: Spondyloarthropathies, SpA, PA, HLA-B27.

INTRODUCTION

Spondyloarthropathy is a group of clinically overlapping chronic inflammatory rheumatic diseases that includes idiopathic ankylosing spondylitis (SpA) (the most common form) [1,2], reactive arthritis, psoriatic arthritis (PA), and inflammatory bowel disease, The clinical spectrum of diseases turned out to be much wider than initially recognized, so some of the fewer specific forms were classified as undifferentiated arthropathy [3,4].

Differentiation of these forms, especially in the early stages, is not always possible due to the unclear severity of clinical features, but this, as a rule, does not affect the tactics of their treatment [5,6].

The SSPA group was formed in the 1970s after a detailed study of seronegative rheumatoid arthritis (RA) cases [7,8]. It turned out that in many patients, the clinical picture of the disease differed from that of the seronegative variant: the development of SpA is often observed, sacroiliac joint damage, asymmetric peripheral arthritis, enthesitis predominate, not synovitis, nodules are not detected Under the skin, there is a familial predisposition to the development of the disease. Prognostically, [9,10,11] these "forms" were evaluated as more favorable than other cases of seronegative and seronegative RA. [12] Subsequently, a close association between SpA and HLA-B27. histocompatibility antigen transport was found [13]

Previous literature and scientific studies of spondylitis developed the first clinical guidelines for the diagnosis of SPA [14]

These criteria were established as classification criteria and cannot be widely used in clinical practice, because their sensitivity in patients with a history of less than one year is less than 70%. Even diseases that occupy a leading position in the SSPA group have significant

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differences in the frequency of detection of the same symptoms [15,16]

According to the study of Amor B. et al., Diagnostic criteria in different studies showed somewhat greater sensitivity (79-87%) due to their lower specificity (87-90%). These criteria allow scoring of the reliability of the diagnosis and giving the best results in the diagnosis of undifferentiated SpA and early cases of the disease.

MATERIAL AND METHOD

Patient sample

50 children were collected from different hospitals in Iraq in the analysis of spondyloarthritis in children in Iraq, and the patients were distributed to 35 boys and 15 girls

Study design

This study was conducted in the hospital but relied on the electronic record to the existing patients, where 50 children were collected and divided into 35 boys and fifteen female patients, where children were identified by relying on clinical data to the diagnosis provided by the treating physicians. Children ranged from 6 to 16 years of age, and patients over 16 years of age were excluded

A large number of classification criteria for spondyloarthritis (SpA) are used simultaneously in the almost complete absence of diagnostic criteria, and that in real clinical practice, frequent use of classification criteria is to establish the diagnosis; Possibility to verify variants of SpA classification in a single patient with the same clinical picture. The purpose of the study was to study the features of the diagnosis of SpA and the application of classification criteria in clinical practice, in addition to rating and study the effect of Spondyloarthropathies for children.

Study period

Statistical data processing was carried out using Microsoft Office Excel 2013 software (Microsoft Corporation, USA), SPSS20.

All patients provided written consent to participate in the study, and the study was approved Ethics Committee and the study period from 9-9-2019 to 7-8-2020

Aim of study

This paper aims to rating and study the effect of Spondyloarthropathies for children.

RESULTS

Table 1- clinical demographic results according to Criteria Used AS

P	ILAR	AMOR
AGE	6.9±2.2	8.9±3.1
SEX		
Boys	20	15
Girl	8	7
Sacroiliitis	15	8
lower extremity sacroiliitis	5	4
Silent sacroiliitis	8	4
Large extremity sacroiliitis	4	2
Extraarticular	30	20

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Fig 1- Treatment before or at time of diagnosis, n (%)

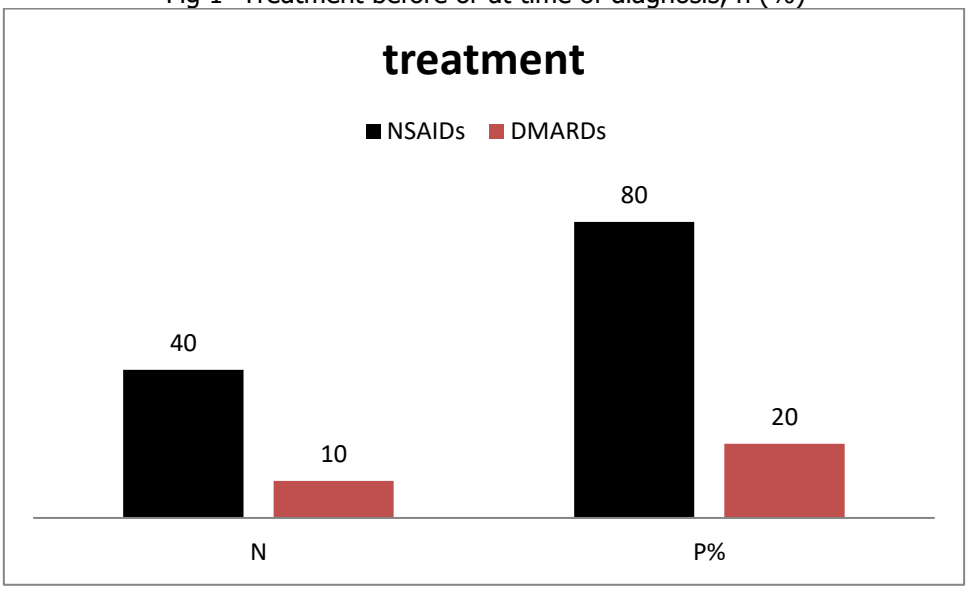

Fig 2- p-value between ILAR and AMOR of demographic results

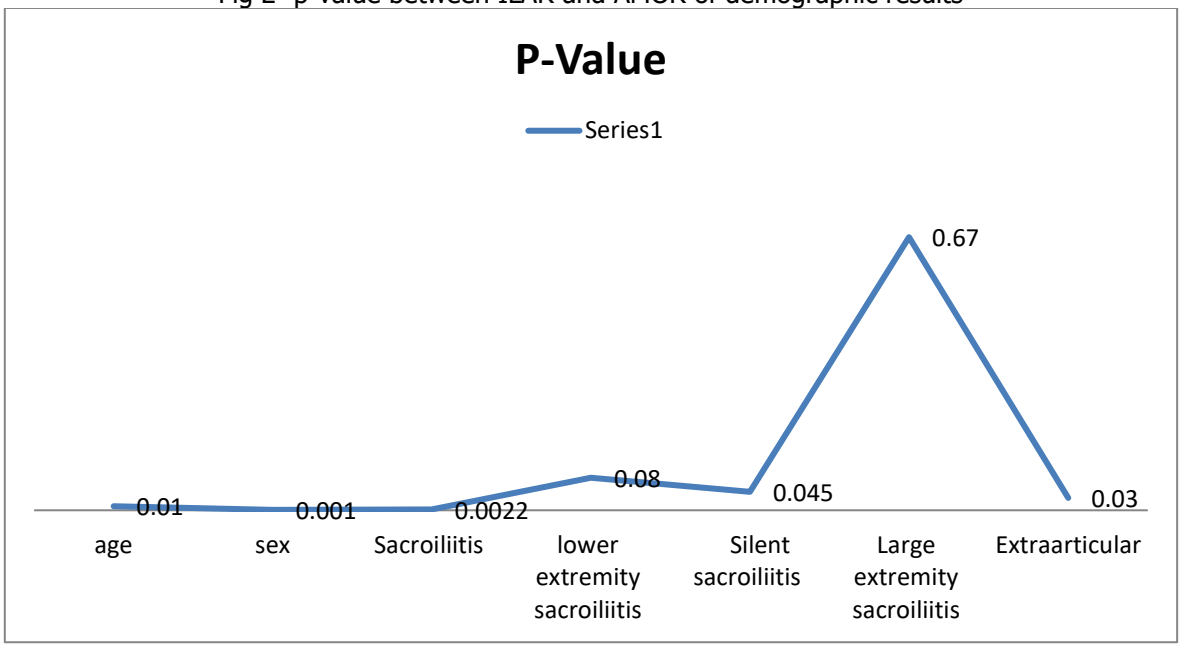

Table 2- outcomes results of patients according to Diagnostic MRI

P	N
Acute sacroiliitis	18
Inflammation of sacroiliac joints	12
Subchondral sclerosis	10
irregularity of bone	3
ankylosing spondylitis	2
Joint space narrowing	1

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Table 3- Results of predictive value to patients

p	or (95% CI)	
age of onest	4.4 (2.8-6.9)	0.001
sex	3.3 (1.5-4.8)	0.034
sacroiliitis	1.2 (0.6-2.4)	0.077
lower extremity sacroiliitis	1.3 (0.77-2.6)	0.093
silent sacroiliitis	1.65 (0.88- 3.22)	0.01
large extremity sacroiliitis	1.24 (0.59-2.55)	0.0041
extraarticular	2.33 (1.11- 4.98)	≤0.001
enthesitis	2.2 (1.1-3.7)	0.005

DISCUSSION

The samples and demographic data that were taken from the electronic record in the hospital were analyzed by relying on the statistical analysis program, and Microsoft Windows, where 50 patients were collected and the two criteria were ILAR and AMOR, and the statistical value to the average age of patients according to the ILAR criterion was 6.9 ± 2.2 and the AMOR criterion 8.9 ± 3.1. As for the distribution of patients by gender (20 patients were boys and eight girls) according to the ILAR criterion, and the patients were distributed according to the AMOR criterion (15 patients were boys and seven girls).

As for the clinical manifestations that were found in patients (Sacroiliitis, lower extremity sacroiliitis, Silent sacroiliitis, large extremity sacroiliitis) as shown in Table 1.

- In fact, the causes of seronegative spondyloarthritis are unknown to science. The main factors are considered genetic predisposition, immune reactions, and external stimuli. Data have been compiled on the alleged association of these diseases with the influence of Gram-negative infectious agents on the body. Most patients have a genetically determined predisposition to developing one of the variants of serous

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spondyloarthritis, which is confirmed by the presence of the HLA-B27 antigen.

Similar studies have been conducted, showing that chronic reactive arthritis lasts up to more than three years. It retains the clinical features and localization of arthrosis characteristic of an acute process, does not show a pronounced tendency to involve new joints, but, on the contrary, with systemic treatment, a decrease in the number of affected joints can be observed.

Sacroiliitis, detected in 77% of patients, usually does not develop with a long-term course and is not associated with clinical symptoms of axial skeletal lesions, while more pronounced stages of sacroiliitis are found only in 12% of patients, but often it does not combine with lesions of the upper parts of the spine.

- The manifestations of seronegative spondyloarthritis are very diverse, but, as a rule, it is an articular syndrome and/or pain in the back, impotence. Peripheral joint lesions occur in the form of sub-acute monoarthritis or asymmetric oligoarthritis. The joints of the lower extremities are mainly involved in this process, and changes in the sternoclavicular, sternoclavicular joints, Achilles tendinitis, subtibial bursitis, and plantar fasciitis can also be observed. There is a tendency to the recurrent, prolonged and chronic course of arthritis.

The multiplicity of symptoms and the presence of common clinical signs greatly complicates the verification of seronegative spondyloarthritis and delays the time for prescribing the necessary treatment. In some patients, the clinical picture does not fit into a specific disease framework of this group, and these conditions are referred to as "undifferentiated serous spondyloarthritis."

Sometimes the only manifestation of the disease is limited mobility of the spine or other damaged joints (shoulder, hip, temporomandibular jaw). Objective examination of the lumbar region shows physiological softness of lordosis, tension of the muscles of the spine, soreness in contact with them. The patient has difficulty bending forward and to the side.

At the onset of the disease, symptoms such as weakness, fatigue, fever, and weight loss are not uncommon.

CONCLUSION

In this study, the diagnosis was based on MRI. Acute sacroiliitis was found in 18 patients, and inflammation of sacroiliac joints came in second place for 12 patients.

Many children have oligoarthritis of the lower extremities, and oligoarthritis means that the disease affects four or fewer joints. Patients who are exposed to a chronic disease may develop polyarthritis, and polyarthritis indicates that the joints affected five or more joints.

Approximately 20% of diagnosed patients are found to be first- or second-degree relatives with the disease, so juvenile spondyloarthritis/arthritis with enthesitis (SPA-ERA) may have some familial roots.

RECOMMENDATION

Treatment is based primarily on the use of medications and physiotherapy/rehabilitation procedures that preserve joint function and prevent deformities. It should be noted that the use of drugs is subject to approval by local regulatory authorities.

Joint injections are used when one or very few joints are affected and if persistent joint contractures may lead to deformity. In general, long-acting corticosteroid preparations are injected, and it is recommended that children be hospitalized and placed under anesthesia for this procedure under the best conditions.

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