GLS in our univariate study. Receiver operating characteristic curve analysis revealed hemoglobin as the best predictor for subclinical LVSD (AUC=0.752, 95% CI 0.577-0.927, P=0.02) when compared to Age and E/A.

Conclusion: This prospective comparative study highlighted the diabetes mellitus and anemia burden on myocardial dysfunction in RA patients.

Disclosure of Interests: None declared

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AB0179

INFLUENCE OF ANTI-CITRULLINATED PROTEIN/PEPTIDE ANTIBODIES (ACPAs) ON ARTICULAR MANIFESTATIONS, DISEASE ACTIVITY AND STRUCTURAL SEVERITY IN ALGERIAN PATIENTS WITH EARLY RHEUMATOID ARTHRITIS

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Background: Anti-citrullinated protein/peptide antibodies (ACPA) are highly specific and sensitive markers for rheumatoid arthritis (RA). There are also suggested to have a more severe rheumatoid arthritis.

Objectives: The aim of this study was to assess the influence of ACPA on disease activity, radiological severity, and functional disability in Algerian patient with early rheumatoid arthritis (RA).

Methods: Consecutive early RA patients (symptom duration ≤24 months) recruited were included in the descriptive, longitudinal, prospective study. Demographic, biological, immunological and radiographic data were collected at the time of inclusion in the study. Disease activity as determined by the Disease Activity Score 28-CRP (DAS28- CRP: 4 variables), functional handicap as calculated by Heath Assessment Score (HAQ), and bone damage as evaluated by Sharp-Van der Heijde (SVDH) erosion and narrowing score.

Results: One hundred and sixty-one patients with RA were recruited. Patients mean age 43.7±14 years and mean symptom duration at inclusion was 10.48±7 months. Small and larges were affected in 64.3%. The mean ESR was 23.53±15.2 mm/1st hour and the mean CRP level was 19.42±39.8 mg/l. Rheumatoid Factors (RFs) and Anti-Citrullinated Protein Antibodies (ACPAs) were present in 74% and 88% of patients, respectively. The presence of ACPAs was significantly associated with DAS28 (p=0.004) and HAQ (p=0.002). There was no significant difference in inflammatory markers and radiographic SVDH score between patients with and without ACPAs. Stepwise regression analysis showed that the presence of ACPAs was independently associated with localization when RA affected smals and larges joint in the same time (OR=5.24; IC 95% 1.224-22.483; p=0.026).

Conclusion: These data show that in patients with early RA, ACPAs positivity was significantly associated with articular manifestations, activity disease and functional handicap, but not with structural damage.

REFERENCES:

Disclosure of Interests: None declared

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AB0380

A MULTICENTER SELF-CONTROLLED CASE SERIES STUDY INVESTIGATING THE PREVENTIVE EFFECT OF SULFASALAZINE AGAINST PNEUMOCYSTIS PNEUMONIA

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Background: An animal study revealed that sulfasalazine (SSZ) enhances Pneumocystis clearance from the lung by accelerating macrophage activity.[1] Although the preventive effect of SSZ on Pneumocystis pneumonia (PCP) in patients with rheumatoid arthritis (RA) is reported in case-control studies, some important confounders might remain unmeasured and distort the results.[2-3] The self-controlled case series (SCCS) method involves only cases and controls fixed confounders automatically.[4]

Objectives: To evaluate the prophylactic effect of SSZ against PCP in patients with RA, controlling unmeasurable confounders by the SCCS method.

Methods: A retrospective study was conducted at five hospitals. Patients with RA who developed PCP between 2003 and 2019 were included. PCP was defined by the following criteria: (1) detection of Pneumocystis jiroveci in respiratory specimens by polymerase chain reaction; (2) clinical manifestations (pyrexia, dry cough, dyspnea, or hypoxia); (3) diffuse interstitial infiltrate on chest imaging; (4) absence of prophylaxis for PCP. Incidence rate ratio (IRR) for Pneumocystis pneumonia associated with sulfasalazine use was calculated by conditional Poisson regression.

Results: We identified 48 episodes of PCP in 47 cases. Of these, 15 (31.9%) died. Thirty received SSZ in certain periods of their observations (Table 1). While 46 episodes of PCP developed in the period of 168.9 person-years without SSZ use, only one episode of PCP developed in the period of 103.7 person-years with SSZ use. SSZ use had a decreased risk of PCP (adjusted IRR 0.007, 95% CI <0.001-0.067) after adjusted for age group, the use of glucocorticoid, methotrexate, and tocolimus, and the use of biologic agent or janus kinase inhibitor (Table 2).

Table 1. Characteristic of the 47 patients enrolled in the study.

<table>
<thead>
<tr>
<th>Characteristic</th>
<th>n (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Male/female</td>
<td>14 (29.8)/33 (70.2)</td>
</tr>
<tr>
<td>Observation period (years), median (IQR)</td>
<td>72.0 (66.3-79.1)</td>
</tr>
<tr>
<td>Lung disease, n (%)</td>
<td>23 (48.9)</td>
</tr>
<tr>
<td>Use of sulfasalazine, n (%)</td>
<td>30 (63.8)</td>
</tr>
<tr>
<td>Outcome of PCP, death, n (%)</td>
<td>15 (31.9)</td>
</tr>
</tbody>
</table>

Table 2. Unadjusted and adjusted incidence rate ratio for Pneumocystis pneumonia associated with sulfasalazine use.

<table>
<thead>
<tr>
<th>Use of SSZ</th>
<th>Unadjusted IRR (95% CI)</th>
<th>Adjusted IRR (95% CI)</th>
</tr>
</thead>
<tbody>
<tr>
<td>No use of SSZ</td>
<td>103.7 (2.1)</td>
<td>0.001 (0.001-0.092)</td>
</tr>
<tr>
<td>Use of SSZ</td>
<td>168.9 (47.9)</td>
<td>reference</td>
</tr>
</tbody>
</table>

IRR, incidence rate ratio; PCP, Pneumocystis pneumonia; SSZ, sulfasalazine.

Conclusion: Our study demonstrated the preventive effect of SSZ against PCP with confounders controlled by the SCCS.

REFERENCES:

Disclosure of Interests: None declared

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