USE OF THE BASDAI IN PSORIATIC ARTHRITIS PATIENTS WITH AND WITHOUT AXIAL DISEASE

Soumya M. Reddy, Elaine Husni, Jose Scher, Ethan Craig, Alexis Ogdie, Jessica Walsh
University of Pennsylvania, Cleveland Clinic, New York University, University of Utah

Background:
- The Bath Ankylosing Spondylitis Disease Activity Index (BASDAI) is increasingly being used to assess the activity of axial disease in patients with psoriatic arthritis (PsA).
- However, five out of six BASDAI questions are not specific to axial disease.
- We sought to address whether BASDAI is different among those with vs without axial PsA.

Methods/Patient Population:
- Participants (pts) were enrolled in the Psoriatic Arthritis Research Consortium (PARC) longitudinal observational study between 2017-Jan 2020.
- Pts with PsA initiating therapy with a BASDAI score at baseline and follow up were included (N=117).
- Axial PsA was defined as a) fulfillment of the ASAS axial spondyloarthritis (axSpA) classification criteria (N=33, 30%) or b) had imaging (MRI, X-ray, or CT) features of axial disease (sacroiliac joints or spine) (N=30, 26%). A total of 40 patients (34%) met one or both of these criteria.

Table 1
- Baseline characteristics and disease activity measures by presence or absence of axial disease in psoriatic arthritis.

<table>
<thead>
<tr>
<th>Measure</th>
<th>All</th>
<th>Peripheral only</th>
<th>Axial* +/- Peripheral</th>
<th>p-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Age (yrs)</td>
<td>49 (13.7)</td>
<td>49.5 (13.1)</td>
<td>48 (15)</td>
<td>NS</td>
</tr>
<tr>
<td>Sex (male)</td>
<td>55%</td>
<td>49%</td>
<td>65%</td>
<td>NS</td>
</tr>
<tr>
<td>Body mass index</td>
<td>29.7 (6.2)</td>
<td>29.6 (6.1)</td>
<td>29.8 (6.7)</td>
<td>NS</td>
</tr>
<tr>
<td>Body Surface Area</td>
<td>1.9 (3.8)</td>
<td>1.2 (1.7)</td>
<td>3.3 (6.1)</td>
<td>0.04</td>
</tr>
<tr>
<td>Swollen Joint Count (0-66)</td>
<td>4.1 (5.2)</td>
<td>3.6 (4.2)</td>
<td>4.9 (6.8)</td>
<td>NS</td>
</tr>
<tr>
<td>Tender Joint Count (0-68)</td>
<td>6.5 (7.3)</td>
<td>6.6 (7.1)</td>
<td>6.4 (7.6)</td>
<td>NS</td>
</tr>
<tr>
<td>Enthesitis count (0-6)**</td>
<td>0.7 (1.1)</td>
<td>0.6 (1)</td>
<td>0.9 (1.3)</td>
<td>NS</td>
</tr>
</tbody>
</table>

Objective:
- To evaluate the specificity of BASDAI for axial disease in PsA compared to PsA without axial disease by examining differences in baseline scores, change in scores after therapy initiation, and responsiveness between the two groups.

Results:
- SRMs were similar across axial vs peripheral only disease for BASDAI (-0.37 vs -0.44 respectively) and individual items. The SRMs for the patient global, patient pain, and RAPID3 however were greater among pts with axial disease.

Conclusions:
- While BASDAI was initially developed as an axial disease measure and works well in axSpA, it is a broad measure of disease activity and current symptoms.
- The BASDAI has similar scores, change in scores, and responsiveness in PsA regardless of the presence of axial disease and therapy type.

Additional Information:
- *BASDAI based measurement
- **Axial PsA is defined as having met ASAS classification criteria for axSpA or having an imaging finding consistent with axial PsA.
- ***Enthesitis count was the Leeds Enthesitis Index plus plantar fascia insertion

Abbreviations: BASDAI = Bath Ankylosing Spondylitis Index; Chg = Change; RAPID3 = Routine Assessment of Patient Index Data; SD = standard deviation; SRM = standardized response mean. NS = not significant (p>0.05); RAPID3 = Routine Assessment of Patient Index Data; SD = standard deviation

Baseline scores

Mean change in each measure following therapy initiation

SRM by measure among TNFi/IL17 initiators

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