(68 TJC)” “tenderness at entheses (LEI)” to detect clinical profiles for early detection of inflammatory musculoskeletal (MSK) processes defined as positive findings in clinical examination (SJC, PsA diagnosis), MSUS or fluorescence optical imaging. Main criteria for inclusion into XCITING as at-risk study were PsA without PsA diagnosis, nail involvement and/or MSK complaints within the last 6 months. For clustering the patients, the AI-based analysis contained three steps: (1) Reducing random noise by performing Non-Negative Matrix Factorization, (2) embedding into 2D using t-SNE and (3) clustering using DBSCAN.

Results: Characteristics of the XCITING cohort were described previously [1]. After performance of the cluster, seven different cluster types were identified (cluster 0-6) according to the clinical data sets of the cohort by use of the attributes and tested for their significance to predict the presence or absence of MSK inflammation in PsO (swollen joints, positive MSUS or positive FOI). Three “tenderness clusters” out of 7 were identified with significant correlation: while as expected cluster 2 (no major findings in LEI and TJC) is associated with no inflammation, “feet-type” involvement (cluster 4) and dominance at PIP and DIP joints (cluster 6) (Figure 1, Table 1) are associated with MSK inflammation at the hands.

Conclusion: Markers for early detection of PsA patients who will develop PsA are missing. Within this analysis we show, that by use of clinical data sets only, risk profiles developed from finding of tenderness at different anatomical regions might be helpful for detection of inflammatory MSK processes. Interestingly, the feet tenderness can also predict MSK inflammation at the hands. A combination of both, clinical data sets and liquid/imaging biomarkers may be identified on base of this observation to increase the potential to detect PsO patients with high-risk profiles for PsA early.


Table 1. Results of the cluster analysis

<table>
<thead>
<tr>
<th>Cohort</th>
<th>Cluster</th>
<th>P-Value</th>
<th>Odds Ratio</th>
<th>CI</th>
</tr>
</thead>
<tbody>
<tr>
<td>No major findings in LEI and TJC</td>
<td>Cluster 2</td>
<td>0.02</td>
<td>0.53</td>
<td>[0.31, 0.91]</td>
</tr>
<tr>
<td>Main involvement at the feet</td>
<td>Cluster 4</td>
<td>0.04</td>
<td>2.0</td>
<td>[1.03, 4.06]</td>
</tr>
<tr>
<td>Main involvement of PIP and DIP joints</td>
<td>Cluster 6</td>
<td>0.02</td>
<td>2.2</td>
<td>[1.10, 4.31]</td>
</tr>
<tr>
<td>Combination of other clusters</td>
<td>0 + 1 + 3 + 5</td>
<td>0.53</td>
<td>0.87</td>
<td>[0.58, 1.31]</td>
</tr>
</tbody>
</table>

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POS0883 SCREENING/REFERRAL STRATEGIES FOR THE EARLY RECOGNITION OF PSA AMONG PATIENTS WITH PSORIASIS: RESULTS OF A GRAPPA SURVEY

Keywords: Psoriatic arthritis, Diagnostic tests

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Background: Diagnostic delay in psoriatic arthritis (PsA) is associated with poorer outcomes, and early screening/referral strategies are important to reduce the delay. Implementation of early screening approaches demands cooperation between rheumatologists, dermatologists and primary care providers (PCPs).

Objectives: To explore the experiences of dermatologists and rheumatologists in the early recognition of PsA and suggest improvements to the current shared-care model.

Methods: A 24-question survey addressing referral strategies was constructed within GRAPPA (Group for Research and Assessment of Psoriasis and Psoriatic Arthritis) and sent to all members (n=927). Questions addressed the use of screening tools, interspecialty involvement in therapeutic decision making, and suggestions for earlier recognition.

Results: Surveys were completed by 113 rheumatologists from 37 countries (across six continents) and 26 dermatologists from 16 countries (across 4 continents), with a mean of 21.7 ± 10.7 and 18 ± 12.3 years experience, respectively.

Results showed that only 27% of patients referred to them from all sources had been assessed with screening tools. Across both specialties, “PEST” was reported to be the most used tool. Whilst dermatologists reported that 67% ± 28% of their suspected PsA cases were confirmed, rheumatologists felt –48% ± 24% of suspected PsA cases were confirmed. Both specialties (n=137) reported similar views regarding optimisation of the diagnostic process: 78% believed that the best approach involved combining patient-reported and physician-confirmed findings (see Figure 1A). Moreover, the education of PCPs was seen as the greatest priority to improve screening with 76% raising this as an unmet need (Figure 1B).

Conclusion: The survey indicated the current unmet needs in the early recognition of PsA. Accordingly, important areas to address include improving the use of validated screening instruments, increasing the education of community-based dermatologists and PCPs, and utilising a combination of patient-reported and physician-confirmed findings to identify patients with a high probability of PsA among those with psoriasis.

REFERENCES: NIL.

Disclosure of Interests: NIL.

Background: Determinants of patient-reported treatment success in psoriatic arthritis (PsA) have not been defined.

Objectives: To determine predictors of patient-reported treatment success in PsA.

Methods: Rheumatologist-diagnosed PsA patients, who met the CASPAR classification, were recruited from a single center. PsA outcome measures included 68/66 joint counts, enthesis, dactylitis, psoriasis body surface area (BSA), patient reported outcomes including PROMIS CAT. The study primary outcome was patient-reported treatment success: “Today, considering the level of control of your psoriatic arthritis and psoriasis, do you consider your treatment has been successful?” with response options Yes/No. Multivariate logistic regression analyses were performed to determine

POS0883 PREDICTORS OF PATIENT-REPORTED TREATMENT SUCCESS IN PATIENTS WITH PSORIATIC ARTHRITIS

Keywords: Psoriatic arthritis, Diagnostic tests

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Figure 1. Clinicians’ views on optimising early PsA recognition.

Figure 1. Cluster analysis of patients with psoriasis only but increased risk for PsA according to the attributes “tenderness of joints (68 TJC)” and “tenderness at entheses (Leeds enthesis index)”