Prevalence and cross-sectional associations of neuropathic-like pain features in rheumatoid arthritis

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Background
• Pain control in RA is often inadequate and clinically significant pain persists in a substantial proportion of patients, even when inflammation appears to be well controlled.
• This suggests that inflammation or subsequent joint damage might not be the only factor causing pain in RA.
• Accumulating evidence suggests that features of neuropathic pain (NP) may also be present in patients with rheumatic pain.

Objectives
• To estimate the prevalence and factors associated with neuropathic-like pain symptoms in patients with RA.

Methods
• Cross-sectional sample of 159 RA patients.
• Patients completed the painDETECT to screen for NP before visiting the outpatient clinic along with other questionnaires.
• Clinical assessments of disease activity were performed at the outpatient clinic.

Results
• 88% of patients were in DAS28 remission or low disease activity.
• 44% of the patients continued to report clinically significant pain (≥4 on the 0-10 NRS).
• According to the painDETECT, 17.0% of patients had likely neuropathic pain and 21.4% possible neuropathic pain.
• Patients with possible or likely NP:
  • had more severe pain;
  • more often met the ACR 2010 criteria for fibromyalgia;
  • more often use analgesics;
  • had more tender joints;
  • had worse physical and mental health status as measured by the SF-36.

• In multivariable analysis, physical and mental health status remained significantly associated with neuropathic pain features, even after controlling for pain severity.

Conclusions
• Neuropathic-like pain symptoms are present in a substantial number of patients with RA.
• Neuropathic-like symptoms are associated with worse physical and mental health.
• The findings underscore the need for further research and screening of pain mechanisms in RA patients.

Multivariable associations with neuropathic-like pain symptoms (painDETECT ≥13)

<table>
<thead>
<tr>
<th>Variable</th>
<th>OR (95% CI)</th>
<th>P</th>
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<tbody>
<tr>
<td>FM survey criteria</td>
<td>1.73 (0.53–5.60)</td>
<td>0.360</td>
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<tr>
<td>Current pain medic.</td>
<td>2.24 (0.98–5.15)</td>
<td>0.056</td>
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<tr>
<td>CRP</td>
<td>0.99 (0.94–1.05)</td>
<td>0.816</td>
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<tr>
<td>Number of TJC</td>
<td>0.96 (0.84–1.09)</td>
<td>0.508</td>
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<tr>
<td>SF-36 PCS</td>
<td>0.90 (0.86–0.95)</td>
<td>&lt;0.001</td>
</tr>
<tr>
<td>SF-36 MCS</td>
<td>0.96 (0.92–0.99)</td>
<td>0.021</td>
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