Psychological comorbidity and disease activity scores in rheumatoid arthritis.

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Background

- One third of people with rheumatoid arthritis (RA) have comorbid depression or anxiety.
- Depression worsens disability and is associated with higher disease activity states, however how it corresponds to specific disease activity measures is not known.
- Previous analyses tend to rely upon non-validated psychological components within other disease measures such as those contained in the Short-Form-36.

Aim

We set out to use routinely collected data, incorporating validated psychological assessment tools, to explore the relationship between mental health disorders and disease activity.

Method

- We compared disease activity scores for 28 joints (DAS28) assessed in patients attending routine RA follow-up clinics with patient-reported physical and psychological outcomes captured using an institutional service development tool (IMPARTS).
- This recorded disability assessed by the Health Assessment Questionnaire (HAQ), depression assessed by nine-item Patient Health Questionnaire (PHQ) and the seven-item Generalized Anxiety Disorder scale (GAD).
- Comparisons were made across groups using Cohen’s standardized mean differences (SMD).

Results

We studied 341 RA patients: 80% female, 76% seropositive, mean age of 57 years and mean disease duration 9 years. Figures 1 and 2 show the prevalence of probable depression and anxiety respectively. Mean disease scores according to depression/anxiety status are shown in Table.

- A total of 54/200 (27%) active patients (DAS28 over 3.2) were depressed compared with 14/141 (10%) with low disease activity (DAS28 under 3.2); odds ratio of being in a low disease state or remission in depressed patients 0.30 (95% CI: 0.16-0.56).
- Anxiety affected 28% of active patients and 11% controls with an odds of low disease 0.31 (95% CI: 0.17-0.57) in anxious patients.
- Comparison between patients with and without probable depression for the DAS score components revealed statistically significant moderate to large SMD for TJC (0.49, p<0.01) and PG scores (0.84, p<0.01).
- SMD were small and non-significant for SJC (0.15, p=0.09) and ESR (0.11, p=0.50).
- A similar comparison between patients with and without probable anxiety disorder found: moderate to large, statistically significant SMD were found for TJC (0.39, p<0.01) and PG scores (0.73, p<0.01); a small but significant SMD for SJC (0.30, p<0.05); and small and non-significant SMD for ESR (0.08, p=0.25).
- Disability scores were higher in patients with depression, with a difference of 0.84 in HAQ, threefold greater than the minimum clinically important difference of 0.22.

Conclusions

Depression and anxiety have substantial impacts on disease activity measures as well as disability. Their effects on disease activity are related to higher TJC and PG assessments. It is difficult to achieve remission if RA patients have substantial psychological symptoms. Greater emphasis is needed on managing these problems, and research is needed to identify the most effective approaches.