ES Nahit, GJ Macfarlane et al. Journal of Rheumatology. June (2001) Vol. 28 # p 1378.

A study of a proposed association between psychosocial factors at work and regional musculoskeletal pain.

It could be argued that chronic pain must be preceded by acute pain. Therefore risk of Diffuse RSI would be reduced if the incidence of acute pain were reduced.

1081 new employees were selected from 12 occupational groups. Median age 23. 32% female. Roughly half had ever worked prior to recruitment at study site.

Pain was recorded if it had been experienced continuously for more than one day.

Subjects were asked to complete the General Health Questionnaire (mental health) and the MRC work demands questionnaire (stress).

261(24%) reported LBP 221(20%) shoulder pain 93(9%) wrist/forearm pain 222(21%) knee pain

Perceived stress 'most of the time' was a risk factor for:

Back pain OR = 1.8 (95% CI = 1.01 to 3.1) Shoulder pain OR = 1.9 (95% CI = 1.02 to 3.4)

when compared with those who were seldom stressed.

Psychological distress (GHQ part of the work) showed that all regional pains were more likely at higher scores:

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GHQ 0 OR = 1
GHQ1-2 OR = 1.7 (95% CI = 1.2 to 2.4)
GHQ3+ OR = 2.8 (95% CI = 1.9 to 4.1)
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For the example of Low Back Pain, but similar results were found for wrist/forearm pain:

OR = 1.0, 1.3 (95% CI = 0.8 to 2.2) and 2.9 (95% CI = 1.1 to 3.5) respectively for the three GHQ scores as above.

The odds of reporting distress increased with multiple pain sites. That is, there was a clear association between pain at multiple sites and distress.

Comment

The association between psychosocial stress and back pain or shoulder pain was just statistically significant.

This report was of a snap-shot of the workers soon after recruitment. The work will be followed up to report on these associations after one year's employment. Increased association at that time would argue in favour of stress as a causal factor.

At present, from these results, it is not possible to distinguish whether the pain causes the perception of stress or the perception of stress causes the pain?

The association of psychological distress with regional pain was much more certain, but again the causal direction cannot be determined as yet.

The probability of and risk factors for conversion from pain that lasts a day, to chronic regional or chronic widespread pain are uncertain.