## Shoulder Pain

H Miranda et al. Occupational and Environmental Medicine. Aug (2001) Vol.58 #8 p 528.

Shoulder injury that is not the direct result of a tissue damaging event may be preceded by a period of shoulder pain. It is argued that elimination of causes of such cumulative shoulder pain would result in fewer cumulative trauma shoulder injuries.

This prospective study aimed at identifying occupational risk factors for shoulder pain.

Subjects were taken from a group of forestry workers in Finland. 2094 were free of shoulder pain at baseline and were accepted into the study in 1994.

Incident and persistent Shoulder Pain was asked about on a Questionnaire.

People who reported no shoulder pain in 1994 and 1995 were compared with people who were pain free in 1994 but in pain in 1995.

One-year incidence of shoulder pain was found to be 14%

Incidence varied significantly with age. For example: for those aged over 55, OR = 2.6 (95% CI = 1.4 to 4.7) vs. those aged less than 35, variation with age showed a consistent trend.

High body mass index was also a significant risk factor OR = 2.2 (95% CI = 1.4 to 3.6); dose response effect confirmed.

Mental stress (origin unspecified) was also a significant risk factor OR = 1.9 (95% CI = 1.1 to 3.3) when comparing high stress with no stress at all.

Jogging was apparently protective, OR = 0.3 (95% CI = 0.1 to 0.8) actively vs. not at all.

Strenuous work was a significant risk factor, OR = 2.0 (95% CI = 1.3 to 3.1) for very strenuous work vs. rather light work.

Twisting movements presented the highest risk, OR = 5.1 (95% CI = 2.1 to 12.3) but the precision of this result is less good than should be relied upon.

Overload at work produced an OR of 3.8 (95% CI = 1.8 to 8.0), but again the range of the 95% CI suggests this may not be a reliable result.

No rates of conversion from shoulder pain to diagnosable pain was reported.

## <u>Comment</u>

Pains in other parts of the body were not reported. Other work shows that regional pain (like shoulder pain) is most often accompanied by aches and pains more generally.

Shoulder pain seems to be associated with poor general health, age and overwork. This study did not find convincing evidence of a preponderance of workplace risk factors for shoulder pain and did not address the diagnosable condition of those reporting pain.