

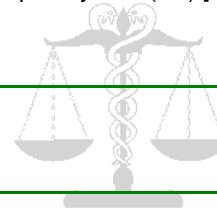
## Tobacco

*D. Hutchinson et al. Annals of Rheumatic Disease. Jan (2001) Vol. 60 #3*

A comparison of 239 cases of Rheumatoid Arthritis (RA) with, 239 controls. Controls taken from a dermatology clinic, and had no inflammatory disease. Cumulative exposure measured in Pack per day Years. A pack contains 20. Self report. [E.g. two packs per day for 10 years = 20 pack years (PY).] Analysis took account of close family history.

Results of this study show a strong association of smoking with RA as follows:

31-40 PY Odds Ratio = 5.72 (95% CI =2.3 to 14.3)
41-50 PY Odds Ratio = 13.54 (95% CI =2.89 to 63.8)
51 + PY Odds Ratio = 8.41 (95% CI = 2.5 to 28.8)
ever smoked Odds Ratio = 1.8 (95% CI = 1.2 to 2.2)



The authors interpret this to show a dose response relationship.

### Comment

These are statistically significant results of sufficient strength to support a hypothesis of an association between RA and smoking. It would be unusual for such results to be produced by chance, though there could be undetected confounding factors.

Previous studies have not stratified data by cumulative exposure and reported only a weak association (in accord with the Odds Ratio reported here for "ever smoked").

Papers reporting biological mechanisms for such an association would be of interest.