

## Information for patients from JNNP

# Study explores link between motor neurone disease and smoking

Smoking tobacco may increase the risk of a type of motor neurone disease, but only for women, a new study says.

## What do we know already?

Amyotrophic lateral sclerosis (also known as ALS, and sometimes called Lou Gehrig disease) is a type of motor neurone disease. The nerve cells affecting movement die, making movement hard to control, and eventually impossible. The condition gets worse over time and is usually fatal within a few years. Doctors don't know what causes amyotrophic lateral sclerosis. It runs in some families, suggesting there may be a genetic link, but 95 per cent of people with ALS have no family history of the illness.

Cigarette smoking has been considered as a potential cause. But studies looking for a link between smoking and ALS so far have not shown clear results.

Now researchers have combined the results of previous research, to see whether this gave a clearer picture.

## What does the new study say?

There was no difference in risk of ALS between people who had ever smoked, never smoked, or were current or previous smokers. However, the study results varied a lot. When the researchers looked more closely at the results, they found that the number of women in the study explained a lot of this variation.

So the researchers split the findings by men and women. They found no increase in risk of ALS for male smokers, but about a 60 per cent increase in risk for women who had smoked.

## How reliable are the findings?

This type of study can't show for certain that smoking does or doesn't cause ALS. But it can show if there's a strong link between smoking and risk of ALS. In this case, the overall figures don't support a strong link, but it may be that the risk only applies to women.

## What does this mean for me?

While smoking may not be the cause of ALS, we know for certain that it causes plenty of other serious health problems, such as many types of cancer, heart disease, and lung disease. This study doesn't change the message that smoking damages health, and that giving up smoking is the best thing you can do for your health.

## What should I do now?

If you want to give up smoking, speak to your health care provider.

Alonso A, Logroscino G, Herná'n, MG. Smoking and the risk of amyotrophic lateral sclerosis: a systematic review and meta-analysis. *Journal of Neurology, Neurosurgery, and Psychiatry*. 2010;**81**:1249-1252. <http://jnnp.bmj.com/content/81/11/1249.full>

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