Information for patients from JNNP

Seizures, strokes, and flights

What do we know already?
Certain types of illness – especially heart attacks and blood clots – have been linked to air travel. But there’s been less study of conditions affecting the nerves, such as stroke and seizures.
A big hospital close to Madrid’s main airport, Madrid Barajas, monitored all the cases referred to its neurology department from the airport over several years, to see if they could spot patterns that might be linked to flight.

What does the new study say?
The most common reason to be referred was having had a seizure, followed by having a stroke.
The majority of the people who had seizures (fits) had not had a seizure before. In most cases, the seizure was linked to having taken drugs or drunk alcohol during or before the flight. In three cases, people had fits because they were smuggling cocaine into the country and had swallowed packets of the drug, which had split.
For those people who did have epilepsy, most said they had either missed a dose of medication, or had disrupted sleep, or had used recreational drugs.
There were a number of strokes, mostly among people who were already at high risk of stroke because of their high blood pressure. Only one stroke was thought to be linked directly to the flight.

How reliable are the findings?
The study is based on a large amount of data, as the hospital recorded all the consultations where people reported having been on a flight up to six hours previously. The findings are likely to be reliable.
What does this mean for me?

Flying is unlikely to cause health problems if you are generally healthy. Alcohol and drugs don’t mix well with air travel and were linked to many of the cases of seizures.

For people with epilepsy, the study shows that the disruption associated with travel can cause health problems if you forget to take medicine or if you fall out of your usual sleep routine. People with epilepsy who are planning a long-haul flight might want to get advice from their doctor in advance about how they can plan to avoid problems.


This summary was prepared by the staff of Best Health, BMJ Group’s patient information service. This information does not replace medical advice. If you have a medical problem please see your doctor.