Premature mortality in people with epilepsy

The link between epilepsy and premature mortality

In this article...

- The link between epilepsy and premature mortality
- Expert commentary on the implications of this evidence

People with epilepsy are at an increased risk of premature death, with a mortality rate that is 2–3 times higher than the general population (Cockerell et al, 1994).

Premature death in people with epilepsy is associated with disease-linked factors (such as status epilepticus), sudden unexpected death in epilepsy (SUDEP) or underlying disease (for example, brain tumour) (National Sentinel Clinical Audit of Epilepsy-Related Death, 2002). However, people with epilepsy also have an increased risk of death from external causes such as suicide (Bell et al, 2009) and accidents resulting from seizures (van den Broek et al, 2004).

National Institute for Health and Care Excellence (2012) guidance on the epilepsies recommends that children, young people or adults with epilepsy, and their families and/or carers, should be provided with tailored information on the person’s relative risk of SUDEP.

New evidence

Fazel et al (2013) assessed premature mortality, in particular from external causes, and the role of psychiatric comorbidities in people with epilepsy. This total population study used the Swedish national patient register to identify people with epilepsy (n=69,995) and whether they had a primary or secondary diagnosis of any psychiatric condition. These patients were matched by age and sex to up to 10 general population controls (n=660,869), and to unaffected siblings (n=81,396). Deaths and their causes were identified during an average follow-up of nine years.

People with epilepsy had a substantially greater risk of premature death from natural causes than the general population and unaffected siblings. The most common natural causes of death were neoplasms and diseases of the nervous system, both of which could potentially be related to underlying disease processes.

People with epilepsy also had a higher risk of premature death from external causes. The risks were highest for non-vehicle accidents such as falls or drowning, followed by suicide, assault and vehicle accidents.

They also had a higher prevalence of psychiatric diagnoses than the general population. The risk of death from external causes in people with epilepsy who had a lifetime psychiatric diagnosis was 10 times higher than in people with no epilepsy and no psychiatric disorders. The risk of premature death was particularly high among patients with epilepsy who had depression or substance misuse. NT

Adapted from Eyes on Evidence (March 2014), a bulletin produced by the National Institute for Health and Care Excellence:


National Institute for Health and Care Excellence: tinyurl.com/EoE-NICE

This study was sponsored by the Wellcome Trust, the Swedish Prison and Probation Service and the Swedish Research Council.

Helen Jaques is a medical writer in evidence information services, National Institute for Health and Care Excellence

References


It has been suspected for some time that people with epilepsy have excess mortality as well as high levels of psychiatric comorbidity.

This large, Swedish, population cohort study shows that accidents and suicides are excessively high in people with epilepsy and associated with depression and substance misuse. Underlying neuro-genetic syndromes and other confounding variables may contribute to the raised mortality rate. However, these syndromes are rare, so the results of this study are probably generalisable to the UK population.

These results may influence clinical practice, in particular case identification for psychiatric disorders in people with epilepsy and the use of anticonvulsant medications, which also have mood-stabilising effects.

Whether case identification should take place in primary or secondary care needs to be debated. Some might argue that primary care doctors are better equipped than neurologists to undertake case identification but, either way, the resource implications are likely to be considerable.

Professor Adrian Wills is honorary clinical associate professor and consultant neurologist, Nottingham University Hospitals Trust

www.nursingtimes.net / Vol 110 No 30 / Nursing Times 23.07.14 19