AETIOLOGY

Epilepsy or a family history of epilepsy increases the risk of schizophrenia or schizophrenia-like psychosis

Q Does a personal history of epilepsy, family history of psychosis, or family history of epilepsy affect the risk of schizophrenia or schizophrenia-like psychosis?

METHODS

Design: Retrospective population-based cohort study.

Follow up period: 52 years.

Setting: General population, Denmark; population registers evaluated for years 1950 to 2002.

People: 2,270,372 people born in Denmark between 1 January 1950 and 31 December 1987, whose mother could be identified. Exclusion criteria: death or emigration before 1977; death before the age of 15; admission to a psychiatric hospital before the onset of epilepsy; or admission with a schizophrenia-like psychosis before the age of 15.

Risk factors: Hospitalisation for epilepsy; age at onset of epilepsy; type of epilepsy (complex partial, other partial, generalised, other); family history of psychosis; family history of epilepsy.

Outcomes: Schizophrenia or schizophrenia-like psychosis (ICD-8 or 10).

MAIN RESULTS

People with a history of epilepsy were about two to three times more likely to develop schizophrenia or schizophrenia-like psychosis than people who had never had epilepsy (see http://www.ebmentalhealth.com/supplemental for table). This effect did not differ according to type of epilepsy. The later the onset of epilepsy the greater the increase in risk of psychosis (schizophrenia p<0.01; schizophrenia-like psychosis p<0.04). A family history of epilepsy or psychosis also increased the risk of developing schizophrenia or schizophrenia-like psychosis (see web table).

CONCLUSIONS

A history of epilepsy or a family history of either psychosis or epilepsy increases the risk of schizophrenia and schizophrenia-like psychosis.

Commentary

Many investigators have suggested that schizophrenia-like psychosis occurs more frequently in patients with epilepsy than in the normal population. However, the pathophysiological mechanisms and risk factors for developing psychosis in epilepsy are not fully understood.

The study by Qin et al is one of the largest population studies to date investigating schizophrenia-like psychosis in epilepsy. Their results confirm that there is an increased risk of schizophrenia-like psychosis in people with epilepsy and in those with a family history of psychosis. Interestingly, in contrast to previous studies,5-4 Qin et al did not find schizophrenia-like psychosis to be more commonly associated with temporal lobe epilepsy than other types of epilepsy.

There are limitations to this study, some of which have been acknowledged by the authors. Clearly, only hospital admission data were used in the analyses for this study and therefore are likely to be representative of patients with more severe epilepsy or psychosis. Diagnoses of both schizophrenia and schizophrenia-like psychosis were included in this study although, strictly speaking, according to the international diagnostic classification systems ICD-10 and DSM-IV, a diagnosis of schizophrenia is precluded in the presence of organic brain disease. This may reflect the lack of consensus on the classification of psychotic syndromes associated with epilepsy. Furthermore, it is assumed but perhaps should have been clarified that people with acute or transient psychotic episodes (for example, postictal or medication induced psychosis) were excluded from this study. This is important to consider given the suggestion that chronic interictal and postictal psychosis may be distinct clinical entities.5

The results of this study should remind clinicians involved in the care of people with epilepsy to facilitate early psychiatric assessment and treatment when there are psychiatric concerns.

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