

relation between the age groups suggests that recall bias was not an important factor.

Comment

As in the 1958 birth cohort,³ results from their offspring provide no support for a protective effect of breast feeding on obesity. In studies reporting a protective effect, it is weak and not always supported by a dose-response relation, which might be expected, at least up to a threshold duration. Any effect of breast feeding may be limited to a critical period or depend on other cofactors. Secular trends do not suggest a protective effect: in both Britain and the United States the incidence of breast feeding has increased since 1990, but so has obesity. Promoting breast feeding is important, but evidence for an important beneficial effect on obesity is still equivocal.

Data were obtained from Centre for Longitudinal Studies, Institute of Education; National Child Development Study Composite File including selected perinatal data and sweeps one to five [computer file]; National Birthday Trust Fund, National Children's Bureau, City University Social Statistics Research Unit [original data producers]; The Data Archive [distributor], Colchester, Essex: SN:3148. 1994.

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Conflict of interest: None declared.

Ethical approval: Not needed.

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- (Accepted 18 August 2003)

Retraction

Hawthorne G, Irgens LM, Lie RT. Outcome of pregnancy in diabetic women in northeast England and in Norway, 1994-7. *BMJ* 2000;321:730-1.

The *BMJ* is retracting this study at the request of the authors because they have realised that a fundamental mistake was made in collecting the data. The authors give a full account on p 929, but the conclusions cannot be allowed to stand. An editorial by Richard Smith discusses retraction (p 883).

Drug points

Weight loss associated with levetiracetam

S Hadjikitoutis, T P Pickersgill, P E M Smith

Levetiracetam is a relatively new anti-epileptic drug licensed for refractory partial epilepsy, although it may have a broad range of action. Levetiracetam's mode of action is unknown.¹ Common adverse effects reported relate to the central nervous system, but recognised gastrointestinal side effects include diarrhoea and anorexia.² We report four cases of considerable weight loss associated with using levetiracetam (table).

No change in anti-epileptic treatment was made during the period of treatment of the four patients, and we identified no other cause of weight loss. The patients lost 2.3-7.0 kg a month, and starting levetiracetam coincided with the start of the period of weight loss. One patient stopped the treatment, and her weight increased. The other three patients decided to continue treatment because levetiracetam had improved their control of seizures. Their weight stabilised or increased after reducing the dose of levetiracetam by 250-500 mg.

The mechanism of the weight loss is unclear. None of the patients reported decreased appetite during the period of weight loss; however, one patient developed pica and craved only toast, cereal, scallops, and caviar. All cases were reported to the Committee on Safety of Medicines and the manufacturers.

We have not found any other reported cases of weight loss associated with levetiracetam. We have about 300 patients who have been prescribed levetiracetam on our epilepsy unit database. These four cases therefore represent about 1% of patients on the drug, which, for a serious adverse effect, might reasonably be regarded as common. Anti-epileptic drugs known to cause considerable weight loss include topiramate and zonisamide.^{3,4} Levetiracetam is also a potential cause of weight loss.

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Department of Neurology, Epilepsy Unit, University Hospital of Wales, Cardiff CF14 4XN

S Hadjikitoutis
specialist registrar in neurology

T P Pickersgill
specialist registrar in neurology

P E M Smith
consultant neurologist

Correspondence to:
P E M Smith
smithpe@cardiff.ac.uk

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Weight loss in patients taking levetiracetam

Patient	Sex	Age (years)	Type of focal epilepsy	Daily dose of levetiracetam (mg)	Duration of treatment (months)	Weight loss (kg)	Other anti-epileptic treatment
1	Male	20	Symptomatic	2000	6	20	Carbamazepine
2	Female	49	Symptomatic	2000	5	35	Sodium valproate
3	Female	30	Symptomatic	3000	6	25	Lamotrigine, clonazepam
4	Female	22	Cryptogenic	3000	12	27	Lamotrigine, topiramate