

notion that epidurals cause long term backache.⁸ If mothers who receive epidural analgesia expect to develop backache, back problems tend to become a focus of attention. A recent study in the United States, where women are not as conscious of any association, failed to show a correlation between epidural analgesia in labour and long term backache (T W Breen and N E Oriol, Society for Obstetric Anesthesia and Perinatology, Charleston, 1992). Many nulliparous women go into labour adamant that they will not have epidural analgesia, only to change their minds when the pain of labour becomes unbearable (W J K Rickford and F Reynolds, Society for Obstetric Anesthesia and Perinatology, Halifax, 1987). Such women may report backache more frequently, not only because of poor posture and muscular relaxation, but also because of their expectations of the possible long term effects of epidural analgesia.

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Prevalence of primary lactase deficiency in adult residents of west Birmingham

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Lactose intolerance in late childhood and adult life is common in most of the world's populations, although northern Europeans are an exception.¹ This intolerance is probably due to genetically determined primary lactase deficiency, but in developing countries it could result from lactase deficiency caused by damage to the small intestinal mucosa, especially that caused by enteric infections. There have been no studies of lactase activity in immigrants from developing countries resident in developed areas and only one on the prevalence of lactase deficiency in native white Britons.²

The aim of the present study was to determine the prevalence of lactase deficiency in the two major immigrant groups resident in west Birmingham and to compare them with native white people.

Patients, methods, and results

We studied 67 white, 55 Indian, and 50 Afro-Caribbean adult patients attending for routine upper gastrointestinal endoscopy for dyspepsia. Two biopsy specimens were taken from the junction of the second and third parts of the duodenum. One was processed for histological examination, and the other was frozen at -20°C for later analysis for disaccharidase. Patients with intestinal disease were excluded. Lactase, sucrase, and maltase activities in the small intestinal brush border were measured by Dahlqvist's method³ with a glucose oxidase colour reagent (Instrumental Laboratory IL test 181614-60). Ratios of sucrase to lactase activities were calculated, and a ratio of >4 signified primary lactase deficiency.⁴

To ensure that our patients were representative of the general population we performed a standard lactose hydrogen breath test on 20 healthy adult volunteers (10 Indian and 10 Afro-Caribbean) as an indirect assessment of small intestinal lactase activity.⁵ A rise in breath hydrogen of 20 ppm over the baseline value at three hours after ingestion of 50g lactose was considered positive.

No patient had partial or subtotal atrophy of the villi, and none had depressed sucrase or maltase

activities in the brush border. Primary lactase deficiency was found in two (3%) of the white patients, 28 (55%) of the Indians, and 41 (82%) of the Afro-Caribbeans. According to the hydrogen breath test, six of the 10 Indians and seven of the 10 Afro-Caribbeans had lactase deficiency.

Comment

Our results show that lactase deficiency was commoner in the immigrant groups than in the white patients, in whom the prevalence was similar to that found in the previous study done in Britain (4.7%).² The similarity between the prevalence of lactase deficiency in patients and that shown by hydrogen breath testing in the volunteers suggests that the patients were probably representative of the general population.

Previous studies of residents of developing countries have often not been able to differentiate primary and secondary lactase deficiencies as causes of lactose intolerance. In our study the normal activities of maltase and sucrase enzymes in the brush borders of all patients with lactase deficiency have shown that the deficiency was primary and not secondary.

Although people with lactase deficiency vary considerably in the dose of lactose required to cause symptoms,⁴ the presence of the deficiency in such a high proportion of certain ethnic groups must be considered when abdominal symptoms in such people are assessed and when they are given any dietary treatment.

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Correction

Medical management of miscarriage: non-surgical uterine evacuation of incomplete and inevitable spontaneous abortion

This article by R C Henshaw *et al* (3 April, p 894-5) stated that sulprostone was voluntarily withdrawn by the manufacturer. It has not been withdrawn in countries where it has been licenced, but the usage has been restricted to intravenous use only.