This month • child abuse • genes and health • postnatal depression • ulcers • food additives • antibiotics for fever • dementia

Management of child abuse

With our newspapers carrying frequent stories of sexual abuse in children, the *Archives of Disease in Childhood* has published two reviews apparently written to help non-specialists handle the problem. The first, by two consultant paediatricians in Leeds, starts by listing the issues identified at regular multidisciplinary team meetings. These included definition of the problem, statement of clear management plans, development of procedures, diagnosis, management of the child and his family, response to abusers, the staffing costs and the need for additonal resources, and a multidisciplinary training programme. They list possible indicators of sexual abuse, from direct reporting, sexually transmitted disease, pregnancy and genital trauma, through genital or anal discharge, bleeding or pain, to much vaguer behavioural symptoms. They outline their own approach of talking to children, suggesting that direct questions may at some stage be required, whatever the doctor's discomfort, and recommend that long interviews should be avoided, warning that many children subsequently recall the process of questioning and examination as damaging.

The second, from the Great Ormond Street child psychiatry unit, gives useful tips on how to talk to children when suspicions have been aroused. For instance, sensitive topics can be approached by general statements such as 'Sometimes children with pains like yours are worried because someone has been touching them in a way that they don't like, but they don't know how to stop it or who to tell about it. Has that been happening to you?' Fictitious reporting is stated to be uncommon, with rates of 6–14% in hospital series and 22% in a series of cases reported to a child protection agency from a variety of sources. The authors warn that this percentage may rise as professionals become more willing to suspect sexual abuse and children with milder and less specific symptoms are referred for investigation.

There are two worrying features in these reviews. First they reveal the distressingly persistent tunnel vision of hospital-based specialists: what is the predictive value, in unselected children, of symptoms such as sleep disturbance, enuresis, or abdominal pain for sexual abuse? Second, the commentary by Roberts that follows takes issue with Hobbs and Wynne for emphasizing reflex anal dilatation as a sign of abuse, and with Leventhal and colleagues for implying that children may need to be asked repeatedly before admitting being abused. What the commentary reveals, however, is less an honest academic difference of opinion than a battle for supremacy in a rapidly-growing and newsworthy field. Granted the last word, Hobbs and Wynne underline this impression with a sharp retaliation that 'it is interesting to find some paediatricians in alliance with the powerless and abused — that is the child — and some police surgeons in alliance with the more traditional authorites in the form of the parents and the police.'

Sources: Hobbs CJ, Wynne JM. Management of sexual abuse. *Arch Dis Child* 1987; **62:** 1182-1187. Leventhal JM, Bentovim A, Elton A, *et al.* What to ask when sexual abuse is suspected. *Arch Dis Child* 1987; **62:** 1188-1193. Roberts REI. Commentary. *Arch Dis Child* 1987; **62:** 1193-1195.

Genes and health

Of recent years, under the patronage of Doll and Peto, the environmentalist view of cancer aetiology seemed to be in the ascendant. Despite the activities of the late Phillip Birch, who constantly emphasized the possibility of an important role for the gene, genetic explanations were given little attention. A recent paper in the *New England Journal of Medicine* provides positive support for a genetic element in cancer of the lung. Hiltrud Brauch and associates have shown, in a small number of cases, that loss of DNA sequences on the short arm of chromosome 3 characterizes not only small-cell lung carcinoma, but also normal tissue in these patients.

Another paper in the *Lancet* provides evidence for a strong genetic component in rheumatoid arthritis. It may be that increasing knowledge will demonstrate that our genes determine, not only our longevity, but the nature of our death, by altering our susceptibility to environmental influences.

Sources: Brauch H, Johnson B, Hovis J, *et al.* Molecular analysis of the short arm of chromosome 3 in small-cell and non-small-cell carcinoma of the lung. *N Engl J Med* 1987; **317:** 1109-1113. Singal DP, Reid B, Kassam YB, *et al.* HLA-DQ beta-chain polymorphism in HLA-DR4 haplotypes associated with rheumatoid arthritis. *Lancet* 1987; **2:** 1118-1119.

Timing of postnatal depression

In 1984 Kumar and Robson showed that postnatal depression, far from being a passing phenomenon confined to the immediate postnatal period, was commoner in mothers at three months than at six months after birth. Nott reports here a study of 212 mothers who were registered with five group practices in Southampton, and who completed pregnancies during a three-month period. Using a semi-structured psychiatric interview, the study showed prevalence figures for depression of 18.5% at three months, 28% at nine months and 31% at 15 months, with the largest number of new cases found between nine and 15 months. The sort of depression reported was characterized by irritability, depressed mood, fatigue and anxiety. Whether or not one accepts the definition of 'caseness' in such a study as an indication for intervention, this paper underlines the emerging picture of considerable emotional disruption lasting for many women for most of the postpartum year.

Source: Nott PN. Extent, timing and persistence of emotional disorders following childbirth. *Br J Psychiatry* 1987; **151:** 523-527.

Problems with ulcers

Although powerful ulcer-healing agents are widely available, they are not always effective and as well as being clinically important this observation has implications for understanding the pathogenesis of peptic ulceration.

For example, it is well known that smokers do less well on histamine receptor antagonist treatment than non-smokers, although the reason for this remains unclear. A study from Zurich by Bauerfeind and colleagues showed that smoking did not have a significant effect on intragastric acidity, nor did it interfere significantly with the anti-secretory effect of cimetidine. Similar results were reported from the surgical department at the Middlesex Hospital in a study of smokers and non-smokers with and without duodenal ulcer. Maximal gastric acid secretion was induced in 122 control and 201 duodenal ulcer patients: differences in height, age and smoking habit were sufficient to account for variations

in maximal secretion between individuals in control and ulcer groups. There was no evidence that smoking in duodenal ulcer patients had a greater effect than in controls but, given that chronic smoking raises maximal gastric secretion, it may in some patients be a sufficient cause of the overwhelming of the duodenal defences.

Gastric acid is clearly not the only pathogenic factor for peptic ulcer and this has led to a number of trials in which an H_2 receptor antagonist has been combined with another agent. In a multicentre trial from the north of England Bardhan reported the lack of effect of a combination of cimetidine and pirenzepine in treating patients with refractory duodenal ulcer, but in a study from Milan Porro's group reported considerable benefit when tripotassium dicitratobismuthate is combined with cimetidine in the treatment of resistant duodenal ulcers; at eight weeks healing rates were 65% on cimetidine 1.2 g daily, 75% on cimetidine 2 g daily and 94% on the combination of the two.

These results confirm previous suggestions that resistant duodenal ulcers are more responsive to an agent which strengthens the mucosal defences than to anti-secretory compounds.

Sources: Bauerfeind P, Cilluffo T, Fimmel CJ, *et al.* Does smoking interfere with the effect of histamine H_2-receptor antagonists on intragastric acidity in man? *Gut* 1987; **28:** 549-556. Whitfield PF, Hobsley M. Comparison of maximal gastric secretion in smokers and non-smokers with and without duodenal ulcer. *Gut* 1987; **28:** 557-560. Bardhan KD, Thompson M, Bose K, *et al.* Combined anti-muscarinic and H_2 receptor blockade in the healing of refractory duodenal ulcer. A double blind study. *Gut* 1987; **28:** 1505-1509. Porro GB, Parente F, Lazzaroni M. Tripotassium dicitratobismuthate (TDB) versus two different dosages of cimetidine in the treatment of resistant duodenal ulcers. *Gut* 1987; **28:** 907-911.

Prevalence of food additive intolerance

An increasing number of people are complaining of intolerance to food additives but it is not clear whether their perceptions correspond to objective clinical assessments. A major survey of the population in the Wycombe health authority area has compared perceived prevalence of food additive intolerance with the numbers which could be confirmed in challenges with selected food additives.

Of 18 582 people who completed a questionnaire about reactions to food additives (62% response rate), 7.4% stated that they had a problem with food additives; a sample of non-respondents gave a figure of 1.1%. Interviews with half of those who said they had a problem (649 people) revealed only 132 with symptoms that suggested they could have an intolerance to additives. Only three of the 81 people who were subjected to double blind, placebo controlled challenges with various food additives showed consistent reactions and the results led to a final estimate of the prevalence of additive intolerance of only 0.01–0.23% in the Wycombe population. This figure corresponds well with previous calculations of prevalence and suggests that the problem of food additive intolerance in the population is small. Certainly, further work is needed to establish why as many as 500 times more people think they suffer reactions to food additives than the clinical evidence would suggest.

Source: Young E, Patel S, Stoneham M, *et al.* The prevalence of reaction to food additives in a survey population. *J R Coll Physicians Lond* 1987; **21:** 241-247.

Antibiotics for the febrile child

High fever is one of the most common symptoms which prompt mothers to bring their children for medical assessment. Most febrile children have self-limiting viral infections, but 3–15% have bacteraemic infections and only half of these will have a recognizable focus for bacterial infection. Some doctors initiate antibiotic therapy immediately, even in the absence of a focal infection, in the belief that this will reduce complications and hasten recovery.

These American authors conducted a prospective, randomized placebo-controlled, double-blind clinical trial of amoxycillin in 955 children aged three to 36 months with temperatures of 39°C or over and no focal bacterial infection. Blood cultures and a full blood count were obtained at the initial visit. Twenty seven children (2.8%) had positive blood cultures (*S. pneumoniae* mainly) but early (expectant) antibiotic therapy did not reduce the incidence of major infectious morbidity associated with bacteraemia. Fever fell more quickly in the antibiotic group but there was an increased incidence of diarrhoea and urticarial rashes in the antibiotic group.

The authors conclude that blind antibiotic treatment of febrile children in the absence of focal infections hastens symptomatic recovery in the small number who have a bacteraemia but produces no benefits in those who do not. In addition, major infectious morbidity was not abolished by early antibiotic use and side effects (diarrhoea and urticaria) increased in the treated group. Prescribing antibiotics is no substitute for meticulous surveillance of the febrile child for the development of major morbidity associated with the infection. Routine oral amoxycillin in febrile children with no focal bacterial disease is unsupported by this study.

Paradoxically an editorial in the same journal waters down the authors conclusions by pointing to 'a new parenteral antibiotic which provides effective serum concentration for 24 hours after a single injection ... and is worthy of consideration in possible occult bacteraemia in children'. Clinicians are left with a double message and a difficult responsibility: the evidence for the value of blind antibiotic therapy in a febrile child without focal disease is unconvincing but the experts (in the absence of evidence) continue to point to the possibility that the newest antibiotic will change that position. Long live careful clinical observation of the febrile child.

Source: Jaffe DM, Tanz RR, Davis AT, *et al.* Antibiotic administration to treat possible occult bacteraemia in febrile children. *N Engl J Med* 1987; **317:** 1175-1180.

Going mad in New York

What is one to make of this careful study showing that the incidence of dementia (and not depression or neurosis) is higher in the elderly of New York than in those of London? The differences were apparent in both sexes and in all age groups, and still applied after adjusting for race and country of origin (which also suggests the difference was not a function of poor diet among the New York immigrant population). One suggestion for the difference is the long-term effects of bootlegged alcohol from the days of prohibition. Otherwise, the findings might support a contributory environmental cause for dementia. Does living in New York really send you bonkers?

Source: Copeland JRM, Gurland BJ, Dewey ME, *et al.* Is there more dementia, depression and neurosis in New york? A comparative study of the elderly in New York and London using the computer diagnosis AGECAT. *Br J Psychiatry* 1987; **151:** 466-473.