Patients were randomised to receive high dose metoclopramide (5 mg/kg) with either placebo (4 ml isotonic saline) or dexamethasone (20 mg in 4 ml). Metoclopramide was made up in 500 ml isotonic saline and infused in 100 ml aliquots beginning half an hour before administration of cisplatin (one hour infusion) and every two hours thereafter. Dexamethasone or placebo was administered by intravenous push half an hour before the cisplatin. The total number of high dose metoclopramide plus placebo courses was 68 and of high dose metoclopramide plus dexamethasone 65. The results were compiled using a standard questionnaire and the patient interviewed by one of us (SGA) about 16 hours after administration of cisplatin. (In the past major inconsistencies have occurred between recollections of nurses and patients, especially as regards retching.) Nausea was recorded on a visual analogue scale; episodes of dry retching were counted separately from episodes of vomiting. The duration of nausea and vomiting was recorded and any side effects attributable to the antiemetics carefully noted. The incidence of platinum induced diarrhoea was also recorded. The table gives the results expressed as percentages of courses.

The addition of dexamethasone to high dose metoclopramide clearly enhanced antiemetic control. Complete control of emesis was recorded in 43% compared with 26% of courses of high dose metoclopramide plus placebo and major control of emesis (0-2 episodes) in 65% compared with 46% of courses. The improvement in nausea after adding dexamethasone did not reach statistical significance but the duration of nausea after chemotherapy was significantly reduced (table). The number of patients who had no nausea,

Effect of high dose metoclopramide with and without dexamethasone

Effect analysed	% Of total courses	
	Dexamethasone + metoclopramide	Placebo + metoclopramide
Complete control of all nausea, retching, vomiting	23	9
Complete control of retching and vomiting	43*	26
Major control of retching and vomiting (< 3 episodes total)	65*	46
Complete control of nausea	32†	24
Major control of nausea (< 33% visual analogue scale)	62†	47
Duration of nausea < 24 hours	43	14
Duration of nausea > 72 hours	19	39

All except † significant at $p=0.05$. *Significant at $p=0.01$.

retching, or vomiting on at least one occasion was 11 in the dexamethasone arm compared with four in the placebo arm. The number of patients who had at least one episode of more than six spasms of retching or vomiting was 20 in the dexamethasone arm and 19 in the placebo arm. There was no significant difference in the number of meals eaten by patients during their chemotherapy (43% of patients taking high dose metoclopramide plus dexamethasone v 34% taking high dose metoclopramide plus placebo ate all their meals). The incidence of diarrhoea after cisplatin was dramatically reduced during the high dose metoclopramide plus dexamethasone courses (6%) as compared with during the high dose metoclopramide plus placebo courses (21%; $p=0.05$).

Extrapyramidal reactions occurred in only three out of 133 courses in two patients and were easily controlled using the anticholinergic agent procyclidine hydrochloride. Tremulousness occurred in 30% of courses in both groups but was short lived and well tolerated. Drowsiness occurred in 40% of both groups, was always mild, and was of symptomatic benefit to many patients.

Comment

Both high dose metoclopramide^{1 2} and dexamethasone⁴ are effective against cisplatin induced emesis and each has been used for other cytotoxic agents such as doxorubicin with some success.^{2 5} Our study shows the improved control of vomiting and retching, the enhanced recovery from nausea, and the diminished diarrhoea when dexamethasone is added to high dose metoclopramide during cisplatin chemotherapy. The added benefit of high dose metoclopramide plus dexamethasone was seen at both dosages of cisplatin. Side effects of antiemetic treatment were not altered by dexamethasone and no specific side effects were attributable to dexamethasone. In terms of altered antitumour activity, Aapro and Alberts showed that dexamethasone did not inhibit the antitumour properties of cisplatin in experimental systems.⁴

We conclude that adding dexamethasone to high dose metoclopramide enhances the protection against cisplatin induced nausea and vomiting with good control of nausea, dry retching, and vomiting in nearly two thirds of courses.

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Impaction of a foreign body in the palate

Various foreign bodies from the prosaic to the exotic find their way into the body's orifices and cavities. In most cases this is accidental, in some it is iatrogenic, and in the more bizarre it is usually deliberate. Children commonly put foreign bodies into their mouths; subsequent ingestion of the foreign body into the alimentary tract, or aspiration into the tracheobronchial tree, may result in dire emergencies.¹ Foreign bodies in the mouth are often related to dental procedures and appliances and may become lodged in the tongue, tonsils, or pharynx. Impaction of a foreign body in the palate is rarely reported,² but we recently saw two almost identical cases.

Case reports

Case 1—An 11 month old boy presented to the paediatric department with a four week history of an abnormal appearance of his palate, which had been noted incidentally and was apparently symptomless. A whitish brown area at the centre of the arch of the palate was initially thought to be an infective lesion, but bacteriological cultures yielded negative results. The infant was referred to the cleft palate clinic, where a dental probe was used to remove a brown plastic cap that fits over the head of a screw (screwhead cap; figure) from the palatal mucosa, which was slightly inflamed.

Plastic screwhead cap removed from palate (diameter 12 mm).

Case 2—An 18 month old girl presented to the casualty department having had something stuck in the roof of the mouth for four weeks; her parents thought it was toffee. On examination a brown, hard area in the centre of the arch of the palate was noted. There were signs of an acute chest infection (fever of 38.3°C), but this was considered to be unrelated to the palatal abnormality. Ulceration of the hard palate was diagnosed and a course of antibiotic treatment started. She was referred to the cleft palate clinic, where

a dental probe was inserted beneath the edge of the round, slightly raised "plaque." A plastic screwhead cap was prised out, leaving the palate undamaged.

Comment

In both these cases the nature of the foreign body in the palate defied diagnosis by either the parents or clinicians. Although this led to considerable delay in presentation, removal was simple and the palate left unscathed. The risks of dislodgement and aspiration of the plastic screwhead cap into the tracheobronchial tree, however, rendered this a potentially serious condition. Because screwhead caps look like small sweets they are attractive to children and their widespread use in the home makes them readily accessible. Ingestion of a cap into the alimentary tract would probably pass unnoticed, but if a cap was inhaled its size is such that it could obstruct the major airways. Though such plastic screwhead caps are not mentioned specifically in reports of foreign bodies in the tracheobronchial tree^{3,4} and do not figure in the series of 50 cases in this hospital (G H Welch, personal communication), we think that they present a considerable risk. This could be minimised by manufacturers including a warning in the instructions issued with furniture that is to be assembled at home. In our experience the central plastic retaining pin in screwhead caps can easily become distorted and therefore fail to fix the cap securely. Use of an adhesive would achieve better fixation.

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Indications for hepatitis B immunoglobulin for neonates of HBsAg carrier mothers

It has been recommended that only babies born to mothers at high risk of transmitting hepatitis B virus—that is, whose serum is HBeAg positive, or when neither HBeAg nor anti-HBe is detectable—should receive specific anti-HBs immunoglobulin.² Despite the scarcity of hepatitis B immunoglobulin in Britain questions have arisen about the necessity of providing specific immunoglobulin and, more recently, vaccine for use in babies born to anti-HBe positive mothers as well as to high risk mothers. Because of the lack of data available in Britain we decided to assess the risk of transmission in carrier mothers attending the antenatal clinic at Edgware General Hospital.

Subjects, methods, and results

Wherever possible serum samples from the mother were obtained at booking and again before delivery. Samples were also obtained from the infants at various times after birth. Children were followed up for an average of 27 months (range 7-60 months). Serum samples were tested for HBsAg, anti-HBs, HBeAg, anti-HBe, and anti-HBc by solid phase radioimmunoassays, as described.³ All samples positive for HBsAg were also tested for significant levels of anti-HBc IgM by radioimmunoassay and the level of HBsAg quantified by reverse passive haemagglutination (Hepatest; Wellcome Reagents, Beckenham, Kent). During the first year of our study (1978-9) the prevalence of HBsAg in mothers was one in 150, reflecting the high proportion of immigrants in our patient population. Eighteen carrier mothers and their 27 children were available for further study (table).

Three mothers were carriers of HBeAg. All had high serum values of HBsAg with reverse passive haemagglutination titres in excess of 1 in 1000. One Chinese mother had three children, all of whom were HBeAg positive carriers. A second Chinese mother had two children; one was an HBeAg positive carrier and the other remained uninfected. Both had received a single dose of hepatitis B immunoglobulin more than 48 hours after birth. A Filipino mother had two children, one of whom had evidence of past infection

(anti-HBc positive) and the other had not been infected. Three mothers were carriers whose serum contained neither HBeAg nor anti-HBe. In this group a single child, aged 4½ years, was found to be immune to hepatitis B virus; his 2 year old brother had not been infected. Twelve mothers were anti-HBe positive carriers. The reverse passive haemagglutination titre in serum was in excess of 1 in 1000 in three, between 1 in 100 and 1 in 1000 in four, and less

Transmission of hepatitis B virus by HBsAg carrier mothers

State	Mothers	Children			
		Outcome			
	No	No uninfected	No immune	No of carriers	Infection rate (%)
HBeAg positive	3	2*	1	4*	71
HBe/anti-HBe negative	3	4	1	0	20
Anti-HBe positive	12	14	1	0	7

* One child in each group (both born to Chinese mother) had received single dose of hepatitis B immunoglobulin more than two days after birth.

than 1 in 100 in five. Three mothers had two children followed up, and the others one child each. Of these 15 children, only one had serological evidence of infection (anti-HBc positive, anti-HBs positive). The HBsAg titre of the mother was greater than 1 in 1000. The remaining 14 children had not been infected.

Comment

The results of this limited study in Britain reflect those of more extensive studies overseas,¹ indicating that children born to anti-HBe positive mothers are not only unlikely to become infected but if they do they are unlikely to become carriers. When hepatitis B immunoglobulin is in short supply, and to avoid a dilution of effort, we believe that our results support a policy of its provision only for babies at high risk. As in other studies,⁴ most of our HBsAg positive patients attending the antenatal clinic were women born outside north west Europe. In our study only two women (one British) were white. Of the remainder, 10 were Asian, four African, and two came from Latin America. All these would have been considered for hepatitis screening anyway, since they came from countries where hepatitis is highly endemic. Nevertheless, we think that limited studies of a similar nature should be undertaken elsewhere in Britain, if only to confirm the low prevalence of transmission of hepatitis B to neonates among British born white women and to disclose any local variations, such as the four out of 22 children born to anti-HBe positive white carrier mothers in Northern Ireland who showed markers of infection with hepatitis B virus.⁵

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