Congenital hypertrophic pyloric stenosis in triplets

The development of congenital hypertrophic pyloric stenosis concurrently in both sibs of uniovular, as well as binovular, twin pregnancies is well documented and has been the subject of numerous reviews (Metrakos, 1953; MacMahon and McKeown, 1955). The condition has also been described in 3 (Cameron, 1955), 4 (Gailey, 1948), and even 5 sibs (Benson, 1970) in the same family.

This is the first report of the simultaneous occurrence of congenital hypertrophic pyloric stenosis in all the sibs of a triplet pregnancy.

Case report

The triplet boys were born on 1 March 1973, after a pregnancy complicated in the first trimester by hyperemesis gravidarum and a progesterone deficiency necessitating replacement therapy. The first 2 infants were vertex deliveries with forceps assistance, and the third was a breech delivery. Birthweights were 2700, 2500, and 2000 g, respectively.

The first-born infant was admitted to hospital on 25 March 1973, with a 6-day history of projectile vomiting. There was mild dehydration and visible gastric peristalsis, and a palpable pyloric 'tumour' in the right hypochondrium was present. Pyloromyotomy was performed on the day after admission.

The second- and third-born triplets were admitted to hospital on 28 March 1973, with projectile vomiting of 6 and 1 day's duration, respectively. Palpable pyloric masses were found in both cases. There was no dehydration. Pyloromyotomies were performed on both infants.

Blood grouping showed the first 2 infants to be group O CDE cde MN, and the third to be group O CDE cde MM.

Comment

Although the aetiology of congenital hypertrophic pyloric stenosis is still subject to speculation, both genetic and environmental factors have been implicated. The facts which tend to substantiate a genetic predisposition include an increased incidence in the children of affected parents (Carter, 1961), a definite male predominance, and a higher incidence of concordance in monozygotic (66·7%) as opposed to dizygotic twins (3·49%) (Metrakos, 1953).

The nature of the environmental factors concerned has not been accurately defined, but the 'skill' with which the infant is handled may be of importance (Benson, 1970). The time of onset of symptoms is related to the length of extrauterine life, the frequency of feeding (Gerrard, Waterhouse, and Maurice, 1955), and the birth rank of the infant (McKeown, MacMahon, and Record, 1952).

Carter (1961) has suggested that there is a single main 'dominant' gene and a multifactorial background which together provide the genotype underlying predisposition to pyloric stenosis. The occurrence of pyloric stenosis in all 3 infants of a nonidentical triplet pregnancy (see blood groupings) tends to substantiate the latter hypothesis.

Summary

Pyloric stenosis affected all 3 of male triplets.

References


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Mixed pneumococcal and tuberculous meningitis

Mixed bacterial meningitis is rare and occurs most frequently in young infants (Herweg, Middelkamp, and Hartmann, 1963). This case report of meningitis due to two organisms, Streptococcus pneumoniae and Mycobacterium tuberculosis, shows some of the diagnostic difficulties encountered and the importance of considering the possibility of a mixed infection.