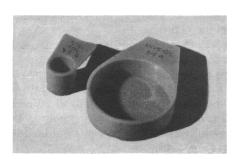
## Gastroenteritis in developing countries

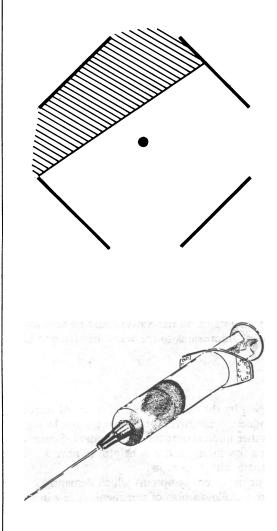


In developing countries the continuation of breast-feeding may be essential for survival. Although infants who are completely breast-fed rarely have severe gastroenteritis weaning foods made up with water may infect a breast-fed infant. These infants can be managed by continuing the breast-feeding and supplementing the fluid intake to prevent dehydration until the infant spontaneously recovers. Supplements may be given by mouth in mild cases and intravenously in severe cases. An easier method is to give them by continuous intragastric infusion, for which the fluid does not have to be sterile.

Oral rehydrating fluids can be made up using specially designed spoons to measure the sugar and salt. Mothers and older siblings can be taught to use this mixture at the beginning of an episode of diarrhoea rather than wait until the child is dehydrated. Simple slogans such as "a cup of fluid for every stool" are effective.

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## Jaundice due to hepatitis A virus



Infectious hepatitis is most commonly due to hepatitis A virus. Before jaundice appears there is often headache, anorexia, nausea, vomiting, abdominal pain, and occasionally fever. The liver may be enlarged and tender, and the spleen and lymph nodes may also be enlarged. Jaundice starts as the fever subsides, and as the jaundice increases the child's appetite improves. The urine is dark because of bile and the stools may be very pale. Jaundice lasts for 8-11 days. In children under 3 years, especially those in institutions, hepatitis may occur without jaundice.

If a child wants to stay in bed he should be allowed to, but prolonged bed rest is not essential. While there is anorexia or vomiting small volumes of glucose-electrolyte mixture flavoured with fruit juice should be given every hour during the day. As the appetite returns a normal diet may be given with no restriction of fat. No drugs are needed though some clinicians recommend vitamin supplements. Viral hepatitis is one of the mildest childhood infections and the prognosis is excellent.

The patient is potentially infectious for no more than a week after the onset of jaundice. The virus is spread by the faecal-oral route, and spread can be prevented by hand washing and by boiling food utensils for at least a minute.

When features are typical no tests are needed and the child should be nursed in his own home. Drowsiness or jaundice lasting longer than two weeks should prompt a further opinion.

Prophylaxis-Type A viral hepatitis has an incubation period of 15-40 days with an average of 30 days. Most human sera, and therefore most human globulin preparations, contain antibody, and if this is given by injection during the incubation period it protects against the disease. The indications for giving this injection are controversial and vary between countries and units. Hepatitis A infections in children are usually mild and confer lifelong immunity, but the incidence of such infections has declined recently in northern Europe, though in southern Europe most people are infected by the time they are adults. In adults hepatitis A is more severe but rarely causes persisting or serious liver disease. In future it is more likely that adults will contract the disease from their children. Nevertheless, globulin should be used only within the incubation period, and preferably within 15 days of contact, and if there is some special reason to fear hepatitis in a sibling or adult. In future it may be thought that all parents of children with hepatitis should be protected and that only gammaglobulin preparations known to contain anti-hepatitis A antibody should be used.