
Complications of acute gastroenteritis in infancy

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Diarrheal diseases continue to be the leading cause of morbidity and mortality in the world today. Severe fluid and electrolyte loss is the most important cause of death as it leads to dehydration, shock and acidosis. Also electrolyte disturbances such as hypokalemia, hypocalcemia, hyperglycemia and reduced serum zinc are not uncommon in severe diarrheal illness. Gastrointestinal complications include acute gastric dilation, paralytic ileus, intussusception, rectal prolapse, post-enteritis malabsorption and persistent post-enteritis diarrhea. Persistent post-enteritis diarrhea is usually due to a transient intolerance to lactose, cow's milk protein or occasionally to gluten or other proteins such as soy bean protein. It may also be due to persisting or unsuspected pathogen such as shigella, Salmonella, adherent EPECOLI, Yersinia enterocolitica and Giardia lamblia. Predisposing factors such as malnutrition, younger age group, delayed hospital admission, the use of antibiotics or antidiarrheal drugs and severe diarrhea during the acute episode also correlated with development of persistent post-enteritis diarrhea. Malnutrition is also an important complication following recurrent attacks of gastroenteritis. Renal complications following acute gastroenteritis are Acute renal failure, DIC nephropathies including tubular necrosis and cortical necrosis, renal vein thrombosis, hypokalemic nephropathy and urinary tract infections. The most important and frequent complication is acute renal failure resulting from many factors such as dehydration, shock, sepsis, DIC, renal vein thrombosis and hemolytic uremic syndrome associating acute gastroenteritis. Respiratory disturbances may also be encountered as a complication of acute gastroenteritis and these include: Shock lung, acute respiratory failure associated with DIC, respiratory infections, acidosis with increased pulmonary vascular resistance and respiratory distress with or without heart failure and pulmonary oedema which may result during management of gastroenteritis due to rapid I.V. infusion or overhydration. C.N.S. complications are also encountered in acute gastroenteritis, the most important of which are convulsions. Convulsions may be febrile, toxic or as a result of hyponatremia, hypocalcemia, hypomagnesaemia, uraemia, hypoglycemia (especially in malnourished) or may be due to phlebotrombosis of cerebral veins which occur principally as a result of severe dehydration. There may also be a permanent brain damage and encephalopathy. Disseminated intravascular coagulation and haematemesis are important haemorrhagic complications occurring as a result of acute gastroenteritis. Derangement of the liver, reactive arthritis, erythema nodosum and erythema multiforme are other uncommon complications of acute gastroenteritis. Iatrogenic complications include

iatrogenichypernatremia following oral electrolyte solution and paralyticileus due to misuse of loperamide in treatment of acute childhood diarrhea.