Hypoalbuminemia and Oedema in a 4 Month-Old Boy

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Aims Primary intestinal lymphangiectasia (PIL) is a well-recognized congenital abnormality of the lymphatic system leading to protein-losing enteropathy (PLE). It is an uncommon disorder seldom seen in clinical practice. The prevalence is unknown. The objective of this case report is to describe the clinical presentation and diagnosis of PIL.

Methods A detailed chart review was performed. Data extracted from the medical records included presenting complaint, disease progression, laboratory results, imaging and clinical measurements.

Results The patient was a 4 month old boy, who presented to the emergency department in Our Lady's Children Hospital, Crumlin (OLCHC) with a 3 week history of bilateral lower limb swelling, easy bruising and a change in stool consistency. The baby was passing watery secretions prior to stool. Stool consistency was clay-like with mucous. Initial bloods showed a severe coagulopathy (PT 204.6 secs, APTT 80.4 secs), severe electrolyte disturbances (Na+128 mmol/l, K+ 2.6 mmol/l), mild transaminase elevation (AST 87 U/l, ALT 49 U/l), metabolic acidosis (pH 7.293, pCO2 4.75, HCO3- 16.9) and profound hypoalbuminemia (13 g/l). The patient was admitted for electrolyte replacement and for further investigation of the underlying cause of the hypoalbuminemia and oedema. Stool alpha-1-antitrypsin (5.66 mg/g) was markedly elevated confirming protein-losing enteropathy. Further investigations including endoscopic biopsies and allergy testing excluded other enteropathies such as coeliac disease, inflammatory bowel disease, congenital enteropathies and allergic enteritis. As in this case PIL pathology is often mid small bowel and beyond the reach of endoscopic biopsies.

Conclusion Hypoalbuminemia can manifestation from a variety of clinical disorders. This patient had an extensive work-up to exclude other possible causes. Once PLE was confirmed, further investigations were required to identify the underlying cause. The main laboratory findings that supported the diagnosis of PIL included hypoproteinaemia, protein losing enteropathy, lymphopenia, panhypogammaglobulinemia, malabsorption of fat-soluble vitamins and, ultimately, response to a low long chain triglyceride containing diet.

Current Practices for the Treatment of Gastroenteritis in Children in Wexford General Hospital

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Background Gastroenteritis(GE) is common in children.

Aim of the audit 1.To identify if rehydration treatment given was appropriate for the degree of dehydration?
2. To look how many children with gastroenteritis received saline boluses in emergency department or in ward when it was not indicated clinically.
3. To find out if we are using modes of rehydration other than intravenous in children with mild to moderate dehydration.
4. Whether ORS solution was used by parents before coming to hospital?

Methodology All children <16 years who presented to emergency department or were admitted in Gabriel ward with symptoms of diarrhoea or vomiting were included in the audit. The audit period was from 06/02/2018 to 31/03/2018.

Results 1.Total 24 patients were collected from ED 20(83%) and Gabriels ward4(17%).
2. Of them 11(45.8%)were female and 13(54.2%)were male patients
3. Age ranges from 5 weeks to 11 years.13(54%)patients were below 2 years of age.
4. All 24(100%) patients had vomiting and 17(70.3%) patients had diarrhoea and vomiting at presentation.8(33.3%) patients had temperature also.
5. 4(16.6%) patients had been given ORS before coming to hospital.
6. 18(75%) patients had no dehydration and 6(25%) with clinical dehydration.No patients presented in shock.
7. Regarding mode of rehydration 20(83.3%) patients were given trial of oral rehydration and 4 (16.7%) were given IV rehydration after failed oral challenge
8. IV bolus of Normal saline were given to 2(8.3%) patients
9. Ondenstron was given to 18(75%) patients. 4(16.7%) patients failed oral challenge.
10. Nasogastric rehydration was not given to any of the patients.

Conclusions The use of ORS before coming to hospital was negligible. If used appropriately at home can reduce the hospital attendances. The NG mode of rehydration was not tried in any of our patients. By adapting NG mode of Rehydration we can avoid IV rehydration. The saline boluses were not indicated in patients who received them as they were not in severe dehydration or shock.

Recommendations and action plan 1. Education of GPS and parents about the importance of use of ORS once started with the symptoms of GE to avoid hospital admissions.
2. Awareness among NCHDs and paediatric nurses to use alternate routes of rehydration other than IV.
3. Patients presenting to ED department with no signs of dehydration should be encouraged for use of ORS at home.
4. Current practice of giving saline bolus in patients who are not shocked should be discouraged.

Coin vs Battery – Imaging of Foreign Bodies

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A previously well 2 year old female presented to a peripheral emergency department following the ingestion of a foreign body. Her parents reported witnessing her swallow a coin, 2 days prior to presentation. She subsequently developed 24 hours of non-bilious vomiting followed by epigastric pain and...