PCCL Session: Summary Report and Resources

PCCL session topic: "The Invisible Threat: A Rare And Serious Case of GI Hemorrhage"

Date: July 19, 2024.

Learning objectives:

- Discuss the differential diagnosis of pediatric gastrointestinal bleed.
- Consider management strategies for a gastrointestinal bleed in a child.
- Review the massive transfusion protocol for pediatrics.

Patient Demographics

A 3-year-old female, who is previously healthy, fully immunized (including COVID and influenza boosters) with normal development and on no regular medications.

History of Presenting Illness

She presented to the ER with concerns of fatigue, pallor and the passage of a large bloody stool. Earlier that week she had presented to an ER with non-blood vomiting. This resolved with ondansetron and she was discharged home.

She received 20mls/kg fluid over the first hour and then maintenance fluids. Once significant anemia was identified, BCCH GI was consulted and they advised an RBCs transfusion, NPO, stool cultures and transfer in am for Meckle's scan +/- endoscopy and colonoscopy.

Key concepts/outcomes:

Heart rate and level of consciousness should be key markers when considering shock in a patient. This patient had a persistently elevated heart rate, which improved but did not normalize with RBC transfusion.

In GI bleeding, a patient is considered high risk if:

1) Heart rate increased 20 bpm above normal rage for age.
2) Melena stools (often seen in loss of >100-200mls blood)
3) Drop of greater than 20 points for hemoglobin from baseline

There is no evidence for use of tranexamic acid in upper GI bleeding in pediatrics.

Consider a patient with an upper GI bleed to have a potentially difficulty airway given risk of emesis and difficult visualization of the cords.

A Blakemore tube can sometimes use in pediatrics, but specific expertise is needed. This is a tube inserted into the stomach and has a balloon component which is inflated in the esophagus and proximal

stomach to tamponade bleeding. There is a risk of esophageal damage and is not within the realm of procedures done at BC Children's Hospital.

The role of NG tube insertion in pediatric upper GI bleeding is unclear. There is a risk of false negative when aspirating as the bleeding could be post-pyloric.

Computed Tomography Angiography (CTA) is usually reserved for obscure GI bleeding. The rate of bleeding needs to exceed 0.5ml/hr for the bleeding source to be identified. Endoscopy is the gold standard.

Resource:

BCCH Massive Transfusion Protocol

The resources shared throughout this session are for reference purposes only. Please consult your health authority leaders for guidance on adoption and use of these resources within your local context.

The advice provided during the PCCL sessions is not intended to replace the clinical judgment of the healthcare providers who are with the patient. While PCCL sessions may suggest recommendations, the final decisions regarding a child's care and treatment should always rest with the healthcare professionals involved in their care at both the referring and receiving centres.

If you need additional in the moment support refer to: https://childhealthbc.ca/pcc/provincial-pediatric-virtual-support-pathways