



Minerva Access is the Institutional Repository of The University of Melbourne

Author/s:

De Marco, R;Shankar, S;Rosenbaum, J;Efron, D

Title:

A Case of the Stomach Flu

Date:

2018-02-01

Citation:

De Marco, R., Shankar, S., Rosenbaum, J. & Efron, D. (2018). A Case of the Stomach Flu. Journal of Paediatrics and Child Health, 54 (2), pp.214-. <https://doi.org/10.1111/jpc.13828>.

Persistent Link:

<https://hdl.handle.net/11343/283609>

Dear Editor,

A 5 year old boy presented to our Emergency Department with a three day history of fever, vomiting and mild cough, followed by one episode of black stools. He had had one dose of oral ibuprofen two days prior to presentation, but no other medications. His past medical history was unremarkable.

On examination he appeared miserable and mildly unwell. He was alert, well-perfused, and not pale. His observations were normal except tachycardia which was persistent despite fluid resuscitation. His chest was clear. His abdomen was soft and non-tender. Examination was otherwise unremarkable.

Initial investigations revealed a normal full blood count, normal coagulation screen, alanine aminotransferase of 90 IU/L (10-25 IU/L), and albumin 28g/L (33-47 g/L). A group and hold was taken and he was started on an intravenous proton pump inhibitor (PPI). In view of ongoing melaena with falling haemoglobin and rising urea, he had an emergency gastroscopy. This revealed haemorrhagic gastritis with multiple pleomorphic ulcers in the fundus and a few serpiginous ulcers along the rugae, with no evidence of active bleeding [*Figure 1*]. Argon Plasma Coagulation was applied to the ulcers to prevent re-bleeding.

Serology for Epstein-Barr virus and Cytomegalovirus were negative, as was stool for viruses and *Helicobacter pylori*. Histology of gastric biopsies showed non-specific inflammation. Polymerase chain reaction (PCR) on nasopharyngeal swab yielded Influenza A. Influenza PCR on the gastric mucosa was negative. He had no further gastrointestinal bleeding, and his haemoglobin fell to a nadir of 72 g/L on day 3. His fever settled over four days. He was discharged on a PPI, and was well at outpatient review after 3 weeks.

This is the author manuscript accepted for publication and has undergone full peer review but has not been through the copyediting, typesetting, pagination and proofreading process, which may lead to differences between this version and the Version of Record. Please cite this article as doi: [10.1111/jpc.13828](https://doi.org/10.1111/jpc.13828)

There have been two previous paediatric case reports describing haemorrhagic gastritis in association with influenza infection. A 12yr old developed haematemesis following a typical influenza-like illness during the 2009 H1N1 Influenza pandemic in USA (1). His presentation was confounded by a history of regular ibuprofen and treatment with Oseltamivir. Influenza was diagnosed using a rapid diagnostic test, and no influenza testing on gastric mucosa was reported. Armstrong et al (2) reported 7 children aged between 5 and 9 years who presented with haematemesis associated with influenza A infection in Australia during the 1988 H1N1 flu pandemic. Haemorrhagic gastritis was seen on endoscopy. A number of these children had severe illness and two died, one from gastrointestinal bleeding, the other from severe hepatic dysfunction. Gastric mucosa was negative for Influenza on a post mortem sample in one case, but was not reported in the others. Our case, with a negative Influenza PCR on gastric mucosa, adds weight to the mechanism of gastric injury in Influenza being non-specific, rather than related to direct invasion.

Influenza infection should be considered in a child presenting with haematemesis and/or melaena. It is important to educate parents regarding cautious use of over-the-counter NSAIDs such as Ibuprofen which can worsen viral gastritis and result in significant bleeding.

References

1. Adalja AA. Haematemesis in a 2009 H1N1 influenza patient. *Am J Emerg Med.* 2010;Sep;28(7):846.e3-4
2. Armstrong KL, Fraser DK, Faoagali JL. Gastrointestinal bleeding with Influenza virus. *The Medical Journal of Australia.* 1991; 154(3):180-182



gastritisatgastroscopy.tiff

Title Page

Title: A Case of the Stomach Flu

Manuscript type: Case Report (Letter to the Editor)

Complete author list:

1. Dr Renata De Marco
2. Dr Sahana Shankar
3. Dr Jeremy Rosenbaum
4. Dr Daryl Efron

Institution address:

The Royal Children's Hospital
50 Flemington Road, Parkville
VICTORIA 3052

Corresponding Author:

Dr Daryl Efron
Department of General Medicine
3 West Clinical Offices
Royal Children's Hospital
50 Flemington Road, Parkville
VIC 3052
Email: daryl.efron@rch.org.au
Phone: +61 3 9345 4563
Fax: +61 3 9345 4751