

## Letter to editor

## Update on retroperitoneal hematoma in children

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World J Emerg Med 2020;11(1):64–64

DOI: 10.5847/wjem.j.1920–8642.2020.01.010

## Dear editor,

We read with great interest the recent article by Badheka et al<sup>[1]</sup> published in your esteemed journal. Hereby we would like to address few additional points related to childhood retroperitoneal hematoma (RPH).

RPH can be broadly divided into two categories, trauma/procedure related or spontaneous bleeding. Similarly, there may be one or more predisposing factors contributing for RPH: chronic liver disease, chronic kidney disease, bleeding disorders, blood thinner, interventions and so on. Most of the literature available on RPH is for adult and elderly age group and very limited data available with regards to childhood RPH. Prevalence of RPH in children <10 years was reported to as 12.5% in a prospective study of 102 patients.<sup>[2]</sup> Baeza-Herrera et al<sup>[3]</sup> in their study on 30 children with traumatic RPH found pelvic fractures followed by ureteral rupture as the most common causes. Interesting study by Johnson et al<sup>[4]</sup> on chronic RPH in children discussed about the challenges faced while approaching such cases without any antecedent history of trauma. History of recent procedure, classical abdominal findings and drop in haemoglobin were crucial points to recognise in the index case which prompted timely diagnosis and successful outcome. Unlike Badheka et al,<sup>[1]</sup> we recently reported atypical cases of adult RPH who presented with raised amylase and meralgia paresthetica respectively.<sup>[5,6]</sup> Raised intraabdominal pressure thereby causing abdominal compartment syndrome is a rare but devastating complication of RPH and/or aggressive fluid resuscitation. There is very sparse literature on how to follow RPH cases.<sup>[7,8]</sup> Role of imaging at follow up is controversial as hematoma may remain unabsorbed for weeks to months despite clinical betterment.

Interventional radiology has revolutionized the management of traumatic/post procedure RPH. Embolization can be either by local thrombus formation (using gelatin sponge particles) which requires intact clotting

capacity vs. by local polymer formation (complex formation between N-butyl-2-cyanoacrylate and plasma) which doesn't require patient's haemostatic activity to be intact.

In conclusion, unlike adult or elderly RPH, similar studies on children RPH is lacking. Through our letter, we strongly endorse for more clinical/prospective studies for better understating of this rare yet rewarding disease entity.

**Funding:** None.

**Ethical approval:** The article doesn't contain the participation of any human being and animal.

**Conflicts of interest:** Authors have no conflicts of interest to declare.

**Contributors:** All authors read the manuscript and agreed to the content and data. All authors played a significant role in the paper.

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Received June 10, 2019

Accepted after revision August 10, 2019