A previously healthy 2-year-8-month-old boy was brought to the emergency department due to non-bilious vomiting several times in one day. Refractory vomiting persisted after fasting with intramuscular metoclopramide use. On evaluation, the patient appeared mildly anxious and showed no signs of acute abdomen. The vital signs were as follows: temperature 36.9°C, blood pressure 122/64 mmHg, pulse 86 beats/min, respiratory rate 20 breaths/min, and oxygen saturation 100% breathing ambient air. Abdominal sonography revealed a heterogeneous mass lesion along the duodenal convexity with a size of 44.2*12.3*13.6 mm (Fig. 1), accompanied with several hypoechoic heterogeneous lesions at the right subphrenic area. Abdominal computed tomography revealed compatible findings indicative of an intramural duodenal hematoma with liver laceration and hematoma (Fig. 2). The patient had no major history of trauma, nor was there bruising or any wound over the abdomen and trunk. His parents only mentioned he played joyfully and jumped into ball pit repeatedly in a hotel two days ago. A whole body bone scan showed no fracture. A survey conducted on neoplasms, including β-hCG, α-fetoprotein, and CA-125, and yielded normal results. His hemoglobin level was 11.6 g per deciliter (reference range, 11.5 to 14.5). Platelet count, platelet function closure time, prothrombin time, activated partial thromboplastin time, and urea solubility test findings were within normal ranges. The Von...
Willebrand factor was 91%, but the ristocetin cofactor assay yielded a result of <11%. The ristocetin cofactor assays of the father and mother of the patient were 12.2% and 14.5%, respectively. Hence, he was diagnosed with type II Von Willebrand disease and treated with Haemate P.

The duodenum is the most common site of intramural hematoma of the gastrointestinal tract (27.5%). Intramural duodenal hematoma can lead to potentially fatal complications; therefore, prompt diagnosis is crucial for successful treatment. Point-of-care sonography is a feasible and convenient modality for diagnosis. Sonographic findings included a round or tubular echogenic mass above the spinal body near the subxiphoid area. This mass could be traced along the gallbladder to the splenorenal recess and may be comprised of hypoechoic cystic lesions or echolucent liquid portions over time as blood is reabsorbed. Familiarity with characteristic sonographic findings contribute to early diagnosis and the initiation of prompt treatment.

Disclosure of potential conflicts of interests

The authors have no conflicts of interest relevant to this article.

Institutional review board statement

This study was approved by the Ethics Board at the MacKay Memorial Hospital, Taipei, Taiwan (approval No.: 22MMHIS081e).

References