

## Subgaleal Hematoma

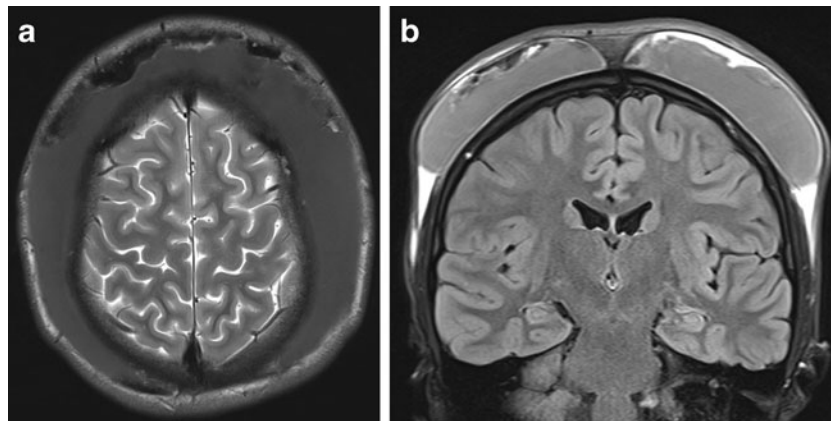
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A 14-y-old boy presented to authors' emergency department (ED) with a fluctuant boggy mass over the scalp after minor traumatic brain injury. MRI studies demonstrated progressive subgaleal hematoma while no osseous lesions were seen on cranial CT scans (Figs. 1a and b). To rule out a clotting disorder in the patient both routine tests of blood coagulation, including the prothrombin time (PT), activated partial thromboplastin time (aPTT), and thrombin time (TT), fibrinogen and d-dimer concentrations, template bleeding time (Ivy method), full blood count to exclude thrombocytopenia as well as a detailed analysis of individual clotting factors (all came back as normal) were performed. Also, both the patient's past medical history and the family history were unremarkable with regard to an underlying coagulopathy.

The subgaleal hematoma was surgically removed with an uneventful post-operative course.

Subgaleal hematoma is caused by rupture of emissary veins and is typically seen in neonates after vacuum delivery [1, 2]. It is located between the periosteum and the scalp galea aponeurotica with the subgaleal space extending from the orbital ridges to the nuchal ridge with lateral confinement to the temporal fascia. Furthermore, a subgaleal hematoma is characterized by crossing of the cranial sutures [1, 2]. In older children—as in index patient—it may be seen after minor head trauma or may be of non-traumatic origin. The hematoma often resolves spontaneously or with conservative treatment using a compression bandage (usually within a few weeks) [3]. In case of failure of conservative treatment, aspiration or surgery may be mandatory [1–3].



**Fig. 1** a (T<sub>2</sub>-weighed) and b (FLAIR): Cerebral MRI (axial and coronal view) demonstrating large subgaleal hematoma prior to surgery

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