Background

- During the last decade, there have been an increased number of publications questioning the reliability of the assumption that unexplained subdural hematoma (SDH) in infants is particularly when accompanied by retinal hemorrhage and brain swelling.

Unexplained SDH in infants* = abusive head trauma

*particularly when accompanied by retinal hemorrhage and brain swelling
Conclusions:

“There is limited scientific evidence that the triad and therefore its components can be associated with traumatic shaking.”
The way forward

“The publication in Acta Paediatrica does not spell the end of the discussion. Instead, it is a clear signal that more research is needed.”

From a letter to the authors by Ludvigsson

Revisiting the association of SDH in venous thrombosis
The three cases outlined in the poster were initially diagnosed with abusive head trauma based on the presence of unexplained subdural hemorrhage.

All three were returned to their parents after judicial review.
Diffuse dural bleeding in the setting of CVT

1 month old ex premature twin with lethargy and seizures. Imaging showed SAH, SDH (blood tinged effusions), clot in the sagittal sinus extending to the torcular, and multiple thrombosed cortical veins.
1 month old ex premature twin with lethargy and seizures

Clot in torcular

Subdural
Arteries, veins, capillaries in the dura are separate from the CNS. Dural capillaries do not establish a BBB, they are fenestrated and leak with neurogenic stimulation.

Changes in the brain produce changes in the dural flow.
Potential etiologies of SDH in the setting of venous thrombosis

• Changes in pressure and flow resulting in bleeding and plasma extravasation from the capillaries of dura

• Increased local pressures in thrombosed veins

• Incidental bleeding from a neomembrane
Thank you