

LEGEND

- Decision Point
- Selection
- Diagnostic Step
- Action Item

Traumatic Brain Injury (TBI)

Low Risk?

No
Yes

Consult Neurosurgery

Apply SCDs and Repeat CT Head 12-24hrs

Low Risk TBI

- No planned neuromonitoring/ neurosurgery within 24hrs
- Diffuse Axonal Injury (Non-brainstem)
- Subdural $\leq 4\text{mm}$
- Epidural $\leq 4\text{mm}$
- Isolated small SAH or IVH (excluding thick SAH and IVH $\geq 6\text{mm}$ diameter)

CT Head Stable and Neuro Exam Stable

No
Yes

Repeat CT Head 24hrs

Consider Consult Neurosurgery

CT Head Stable and Neuro Exam Stable

No
Yes

Consult Neurosurgery
B/L LE screening
Doppler q7d
IVC filter if positive for DVT
Continue use of SCDs

Start Enoxaparin
40mg SC daily

Benjamin et al. Pharmacological Thromboembolic Prophylaxis in Traumatic Brain Injuries Low Molecular Weight Heparin Is Superior to Unfractionated Heparin, *Annals of Surgery*. 2017; 266(3): 463-469.

Margolick, J., Dandurand, C., Duncan, K. et al. A Systematic Review of the Risks and Benefits of Venous Thromboembolism Prophylaxis in Traumatic Brain Injury. *Canadian Journal of Neurological Sciences*. 2018; 45(4): 432-444.

Signer, R., Ogilvy, C. & Rordorf, G. (2020). Subarachnoid hemorrhage grading scales. In J. Biller & R. Goddeau, Jr (Eds.), *UpToDate*. Retrieved January 25, 2021, from https://www.uptodate.com/contents/subarachnoid-hemorrhage-grading-scales?search=fisher%20scale&source=search_result&selectedTitle=1~4&usage_type=default&display_rank=1#H7.

Stormann, P., Osinloye, W., Freiman, T. et al. Early Chemical Thromboprophylaxis Does not Increase the Risk of Intracranial Hematoma Progression in Patients with Isolated Severe Traumatic Brain Injury. *World Journal of Surgery*. 2019; 43(11): 2804-2811.