

“THE HIDDEN DANGER OF A NECK HEMATOMAS” : A CASE REPORT ON BLUNT CEREBROVASCULAR INJURY.

MOHAMED HAKIMI BIN ABDUL KADIR¹, SARETH RAJ KESAVARAJ¹, DARLENE FLAVIUS ONGKILI¹

¹HOSPITAL QUEEN ELIZABETH, KOTA KINABALU, SABAH, MALAYSIA.

Introduction:

Blunt Cerebrovascular Injury (BCVI) is an often overlooked complication caused by a blunt force trauma to the carotid or vertebral arteries. Early detection remains challenging to the due subtlety of the initial symptoms. A high index of suspicion along with a screening tool is needed for prompt diagnosis using computed tomographic angiograph (CTA).

Case Description:

A 28-year-old female was brought by the ambulance to a district hospital following a motor vehicle accident, exhibiting a small anterior neck hematoma and a Glasgow Coma Scale (GCS) of E1V1M1. She was intubated for airway protection and promptly transferred to a trauma center where CT Brain revealed no intracranial bleeding. The CTA of the Carotids however, showed a significant intraluminal stenosis (>75%) of the right common carotid artery, indicative of BCVI. Further MRI scans during inpatient admission showed a right common carotid artery dissection with Intimal flaps noted at the cranial and caudal edge of the thrombus confirming the diagnosis.

Discussion:

BCVI remains underdiagnosed due to its nonspecific presentation and it can be masked by other more serious injuries in a polytrauma case. Incorporating a screening tool such as the Denver Criteria in the assessment of a trauma patient can improve early detection rates allowing for prompt management and mitigating the risk of severe complications such as an ischemic stroke and even death. Grading of the injury will also help guide the treatment direction for BCVI.

Conclusion:

BCVI awareness in the emergency department is important in order for early detection and appropriate intervention. This case exemplifies the importance of having a high index of suspicion for diagnosis of BCVI. Screening and grading tool for BCVI should be applied in select trauma patients to improve patient outcome.

Keywords: Blunt Cerebrovascular Injury, Blunt Neck Trauma, Denver Criteria