Traumatic subarachnoid hemorrhage (tSAH)

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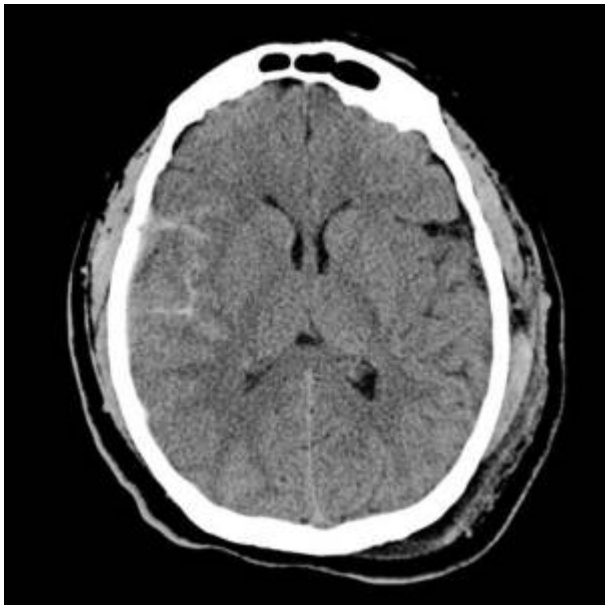
- Inpatient neurosurgical mortality in germany: a comprehensive analysis of 2023 in-hospital data
- Post-traumatic hydrocephalus after decompressive craniectomy: a multidimensional analysis of clinical, radiological, and surgical risk factors
- Risk factors for the development of hydrocephalus in traumatic brain injury: a systematic review and meta-analysis
- Relationship Between Systemic and Cerebral Microdialysate Glucose in Patients With Severe Acute Brain Injury-A Retrospective Study
- Detection of cerebral aneurysms in nonenhanced CT images of patients with subarachnoid hemorrhage using the filling defect sign
- Association between coagulation biomarkers, intracranial hemorrhage types, and tranexamic acid treatments in early traumatic brain injury
- Liberal Versus Restrictive Transfusion in Acute Brain Injury: A Systematic Review and Meta-Analysis



Traumatic subarachnoid hemorrhage (SAH) is the pathologic presence of blood within the subarachnoid spaces, typically the superficial sulci along the cerebral convexities [1) 2)].

Epidemiology

Traumatic subarachnoid hemorrhage epidemiology.

Classification

Traumatic subarachnoid hemorrhage classification.

Pathology

Traumatic subarachnoid hemorrhage pathology.

Diagnosis

Traumatic subarachnoid hemorrhage diagnosis

Differential diagnosis

Helpful features in suggesting that subarachnoid hemorrhage is the result of trauma, rather than the reason for trauma. These features include:

documented (witnessed) trauma not being preceded by a headache or loss of consciousness or seizure

subarachnoid blood being relatively minor and associated with cerebral contusions

subarachnoid blood located over the convexity of the brain rather than around the circle of Willis or posterior fossa

location of subarachnoid blood deep to scalp hematoma or in a contrecoup distribution

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Patients with traumatic SAH have increased leukocyte counts on hospital admission, which is an important parameter of severity of injury and an additional marker of neurological outcome in patients with severe head trauma [3].

Neutrophil to lymphocyte ratio (NLR) and Platelet-to-lymphocyte ratio results (PLR) and eosinophil count values could be predictive for etiological factors (traumatic SAH or spontaneous SAH) of patients who were admitted unconscious to the emergency room with SAH detected on radiological imaging [4].

see Neutrophil to lymphocyte ratio for subarachnoid hemorrhage.

Treatment

see Traumatic subarachnoid hemorrhage treatment.

Outcome

Traumatic subarachnoid hemorrhage outcome.

Case series

Traumatic subarachnoid hemorrhage case series.

References

1)
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Nassiri F, Badhiwala JH, Witiw CD, et al. The clinical significance of isolated traumatic subarachnoid hemorrhage in mild traumatic brain injury: a meta-analysis. J Trauma Acute Care Surg. 2017;83(4):725–731. doi:10.1097/TA.0000000000001617
3)
Rovlias A, Kotsou S. The blood leukocyte count and its prognostic significance in severe head injury. Surg Neurol. 2001;55(4):190–196.
4)
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