

## **Pilot Study to Assess Factors That Affect Accuracy of B-Mode Cranial POCUS for ICH Diagnosis**

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**Introduction:** Point of Care Ultrasound (POCUS) has several clinical applications. We performed an exploratory study to assess factors that affect the accuracy of cranial POCUS B mode for diagnosis of ICH.

**Methods:** We enrolled 11 patients and acquired cranial Ultrasound B mode images. One investigator blinded to pathology performed the ultrasounds and images were reviewed by a blinded neuroradiologist and then compared to CT scans for elucidating B-mode pathology.

**Results:** The sensitivity and specificity point of care diagnosis of ICH was 100% and 50% respectively. Comparing ultrasound images with CT scan/MRI, false-positive ICH diagnosis was attributed to intracranial tumors and choroid calcifications.

**Conclusion:** Our exploratory analysis yielded preliminary data on the use of cranial ultrasound for ICH diagnosis but is limited by small numbers. A current ongoing trial is exploring the accuracy of cranial ultrasound compared to CT scan for possible field diagnosis of ICH.