Chronic hyperdense subdural hematoma

Evidence suggests that hyperdense (HD) chronic subdural hematomas (CSDHs) have a higher recurrence than hypodense (LD) chronic subdural hematomas. The value of mean hematoma density (MHD) has been proven to be associated with postoperative recurrence. The MHD levels in homogeneous CSDHs likely underestimate the risk of recurrence in HD homogeneous subtypes. Methods: This study investigated 42 consecutive CSDH cases between July 2010 and July 2014. The area of the hematoma was quantified to determine the MHD level using computer-based image analysis of preoperative brain CT scans. Results: In terms of the MHD distribution of the four types of CSDHs (homogeneous, laminar, separated, and trabecular), wide 95% CI (11.80-16.88) and high standard deviation (4.59) can be found in homogeneous types, reflecting a high variability in the MHD levels between cases (from low to high density). The categorization of homogeneous types into LD and HD (type five) displayed a minor standard deviation in the MHD levels for LD and HD subtypes (1.15, and 0.88, respectively). MHD values demonstrated concentrated distributions among the respective five types, compared to the four-type setting. Conclusions: In the current research, we provide a consideration that if LD and HD hematomas are separated from homogeneous CSDHs, the variability of the MHD quantification can potentially be reduced, thereby avoiding the possibility of undetected high-risk groups [1].

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Kung WM, Wang YC, Chen WJ, Lin MS. Homogeneous Chronic Subdural Hematoma with Diverse Recurrent Possibilities. Diagnostics (Basel). 2022 Nov 4;12(11):2695. doi: 10.3390/diagnostics12112695. PMID: 36359538.