Overlap Between Computed Tomographic Features Of Hemorrhagic Cerebral Venous Thrombosis And Amyloid Angiopathy

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Background

•Amyloid angiopathy and cerebral venous thrombosis lead to lobar hemorrhage and subarachnoid hemorrhage.

•Given the relatively high prevalence of amyloid angiopathy in the elderly population, incidental co-occurrence of these conditions is not surprising.

Objectives

- To study the overlap between these two conditions.
- We study the prevalence of common imaging markers of cerebral amyloid angiopathy in a large cohort of patients with established hemorrhagic cerebral venous thrombosis.

Methods

- Edinburgh CT criteria and the modified Boston criteria for cerebral amyloid angiopathy were applied by 2 independent researchers to patients with confirmed diagnosis of hemorrhagic cerebral venous thrombosis.
- We identified lobar hemorrhage with or without finger like projections, subarachnoid hemorrhage, microbleeds & cortical superficial siderosis.
- Neither histopathological study of the hematoma nor cortical biopsy of our cases was done.
- APOE genotyping was not available

Results

- Study Cohort:102 patients,10 institutions
- Mean age :46 Ys (73% females)

According to Edinburgh criteria

High probability CAA
12 (15%)

Intermediate probability CAA
7 (9%)

Low probability CAA
60 (76%)

102 Hemorrhagic CVT patients

82 patients eligible for stratification by Modified Boston criteria

Probable CAA
7 (9%)

Possible CAA
13 (16%)

Conclusion

Hemorrhages from cerebral venous thrombosis may mimic cerebral amyloid angiopathy related hemorrhages. Therefore, the presence of cerebral venous thrombosis needs to be considered in patients who present with hemorrhage suggestive of cerebral amyloid angiopathy