

Bilateral Thalamic Hypodense Lesions in Computing Tomography

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Abstract : Purpose of Learning Objective: This case depicts the need for cooperation between the emergency department and the radiologist to achieve the best diagnostic result for the patient. The clinical picture must correlate well with the radiology report and when it does not, this is not necessarily someone's fault. Careful interpretation and good knowledge of the limitations, advantages and disadvantages of each imaging procedure are essential for the final diagnostic goal. Methods or Background: A patient was brought to the emergency department by their relatives. He was suddenly confused and his mental status was altered. He hadn't any history of mental illness and was otherwise healthy. A computing tomography scan without contrast was done, but it was unremarkable. Because of high clinical suspicion of probable neurologic disease, he was admitted to the hospital. Results or Findings: Another T was done after 48 hours. It showed a hypodense region in both thalamic areas. Taking into account that the first CT was normal, but the initial clinical picture of the patient was alerting of something wrong, the repetitive CT exam is highly suggestive of a probable diagnosis of bilateral thalamic infractions. Differential diagnosis: Primary bilateral thalamic glioma, Wernicke encephalopathy, osmotic myelinolysis, Fabry disease, Wilson disease, Leigh disease, West Nile encephalitis, Greutzfeldt Jacob disease, top of the basilar syndrome, deep venous thrombosis, mild to moderate cerebral hypotension, posterior reversible encephalopathy syndrome, Neurofibromatosis type 1. Conclusion: As is the case of limitations for any imaging procedure, the same applies to CT. The acute ischemic attack can not depict on CT. A period of 24 to 48 hours has to elapse before any abnormality can be seen. So, despite the fact that there are no obvious findings of an ischemic episode, like paresis or imiparesis, one must be careful not to attribute the patient's clinical signs to other conditions, such as toxic effects, metabolic disorders, psychiatric symptoms, etc. Further investigation with MRI or at least a repeated CT must be done.

Keywords : CNS, CT, thalamus, emergency department

Conference Title : ICR 2023 : International Conference on Radiology

Conference Location : Moscow, Russia

Conference Dates : August 24-25, 2023