ISSN: 2584-0355
DOI: doi.org/10.51219/MCCRJ/Diego-Cesar-Monroy-Chaparro/414

URF PUBLISHERS
connect with research world

Medical & Clinical Case Reports Journal

https://urfpublishers.com/journal/case-reports

Vol: 3 & Iss: 4

Review

Cashew sign (cashew nut), a finding of High Relevance in the Diagnosis of Cerebral Venous Thrombosis

Diego Cesar Monroy Chaparro[1]*, Reyes del Castillo Tomas Alejandro[1] and Brenda García Rodríguez[2]

[1]Department of Radiology, Central North Hospital, National Autonomous University of Mexico, Mexico City

[2]Department Radiology of Pemex Regional Hospital of Salamanca , University of Guanajuato, Mexico City

Citation: Cesar MCD, Alejandro RCT, Rodriguez BG. Cashew sign (cashew nut), a finding of High Relevance in the Diagnosis of Cerebral Venous Thrombosis. *Medi Clin Case Rep J* 2025;3(4):1474-1476. DOI: doi.org/10.51219/MCCRJ/Diego-Cesar-Monroy-Chaparro/414

Received: 14 November, 2025; **Accepted:** 17 November, 2025; **Published:** 19 November, 2025

***Corresponding author:** Diego Cesar Monroy Chaparro, Department of Radiology, Central North Hospital, National Autonomous University of Mexico, Mexico City

ABSTRACT

Is a 64-year-old female patient, with a previous diagnosis of infiltrating ductal carcinoma with the presence of metastatic activity at different levels (pulmonary, pleural, meningeal, spine, pelvis)., who begins suffering with headache of great intensity, associated with neurological deterioration (seizures, dysarthria) several tomographic studies are performed during the first month of hospitalization. The second study that was performed showed an image compatible with the sign of cashew (cashew nut), which represents a radiological sign of high sensitivity in the diagnosis of intracerebral haemorrhage secondary to thrombosis of the cerebral venous sinuses.

Keywords: Cashew sign; Thrombosis; Cerebral Sinuses

Introduction

Cerebral venous sinus thrombosis is a rare condition whose clinical presentation is very nonspecific in the early stages. The use of imaging studies in the management of patients with risk factors is a great aid in early diagnosis that improves the chances of survival. The cerebral venous sinuses most affected by thrombosis are the superior sagittal sinus (60%), left transverse sinus (45%), right transverse sinus (40%) and to a lesser extent, the straight sinus, deep cortical veins and cavernous sinus[1]. The initial radiological findings of cerebral venous sinus thrombosis are nonspecific, the most frequent is the visualization of homogeneous hyper densities in the affected sinuses, as well as the "rope sign," which is the endoluminal thrombus in the cortical veins[2]. In later stages, the cashew nut sign is a highly sensitive diagnostic indicator of intracerebral haemorrhage secondary to cerebral venous sinus thrombosis[3].

Clinical Case

Is a 64-year-old female, diagnosed with invasive ductal carcinoma of the left breast (November 2020) and presence of metastatic activity in the lungs, bilateral pleura, spinal canal meninges, bones (spine, pelvis and right femur) and peritoneum on the left side, documented in a CT scan of December 2020.

In July 2024, she was taken to the emergency department due to new-onset seizures. A simple and contrast-enhanced CT scan of the skull was performed, which showed no evidence of ischemic or haemorrhagic cerebrovascular events or signs of fracture. No filling defects in venous or arterial structures were identified at that time. only blurring of the sulci at the right fronto-parietal level was visualized, with the other findings related to the aging process (decrease in cortical volume predominantly in the frontal lobe).

Three days later appears in new CT scan two hypodense areas at the bilateral frontoparietal level, the one on the left side with a hyperdense image inside an attenuation range of 40-62 HU, which constitutes the cashew nut sign, corresponding to a concave intraparenchymal haemorrhage secondary to thrombosis of the left transverse venous sinus.

Image of a cashew nut or Indian nut **(Figure 1), (Figure 2)** from a single-phase cranial tomography scan.

Figure 1: Image of a cashew nut or Indian nut.

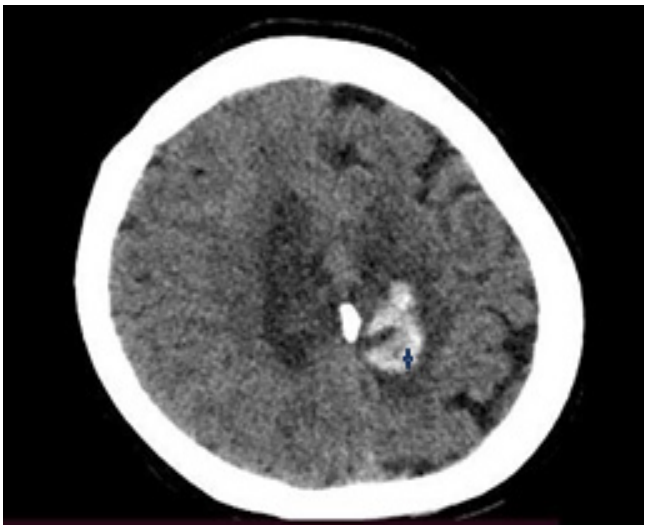

Figure 2: Single-phase cranial tomography scan

Sagittal **(Figure 3)** and coronal **(Figure 4)** images of a single-phase cranial tomography, showing the cashew sign (cashew nut).

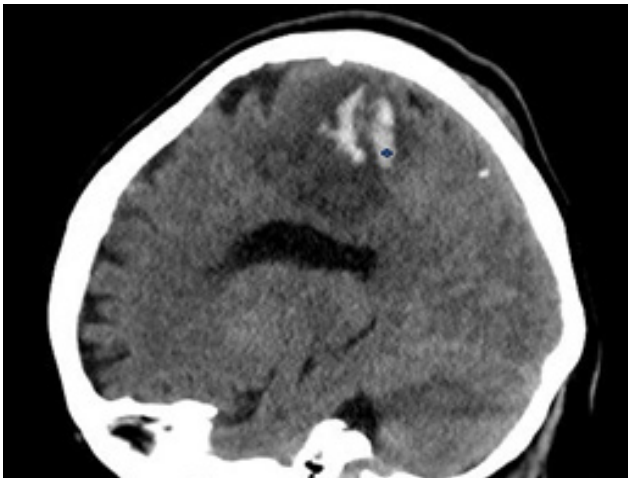

Figure 3: Sagittal image of a single-phase cranial tomography, showing the cashew sign (cashew nut).

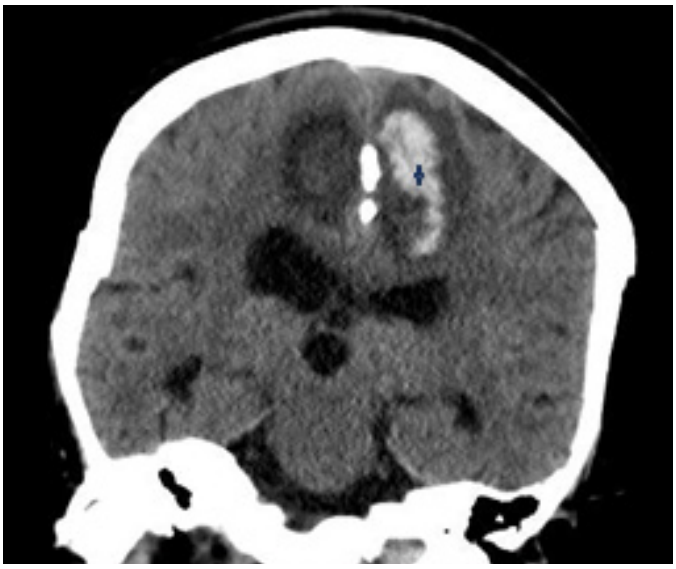

Figure 4: Coronal image of a single-phase cranial tomography, showing the cashew sign (cashew nut)

Discussion

Cerebral venous sinus thrombosis is a rare type of ischemic stroke (less than 5% of cases), but with a high mortality rate[1].

Risk factors for this condition include autoimmune vascular diseases, prolonged use of oral contraceptives, severe head trauma, blood dyscrasias (leukaemia, thrombocytopenia), coagulation disorders (antithrombin and protein C and S deficiency), as well as oncological conditions, as presented in this case[2].

The pathophysiological mechanism of thrombosis at this level is related to the hypercoagulable state of the blood secondary to neoplastic activity and at a distance.

Symptoms are usually nonspecific and related to the type of vessel affected, the severity and the time of evolution. Severe headache is the most common symptom (90%), followed by de novo seizures, paresis, papilledema, signs related to increased intracranial pressure due to altered cerebrospinal fluid flow and reabsorption (nausea and vomiting) and altered consciousness[3].

The first imaging study that should be performed is computed axial tomography. It shows changes nonspecific, for example hyper density of the thrombosed sinuses, hypodensities in the cerebral parenchyma[1].

Summary/Conclusion

The clinical manifestations associated with cerebral venous sinus thrombosis are nonspecific and often depend on the patient's medical history to generate a suspected diagnosis. For this reason, tomography is a cornerstone of diagnosis and treatment, it provides classic early radiological signs such as hyperdensity of thrombosed sinuses and hypodensity in the brain parenchyma, which characterize this vascular pathology[1].

However, the cashew nut sign is important due to its high diagnostic (98%) and prognostic sensitivity, failure to identify it in the early stages delays timely therapeutic intervention and increases the rate of complications and probability of death[3,4].

References

1. Guenther G, Arauz A. Trombosis venosa cerebral: aspectos actuales del diagnóstico y (Barcelona, tratamiento. Neurology Spain) 2011;26(8):488-498.
2. Sharma R. Cashew nut sign. En Radiopaedia.org 2022.
3. Schlechter M, Lucey K, Peng TJ, Amin H. Cashew nut sign: A concave parenchymal haemorrhage caused by cerebral venous thrombosis. Stroke; a J Cerebral Circulation 2023;54(2).
4. Ehtisham A, Stern BJ. Cerebral venous thrombosis. The Neurologist 2006;12(1):32-38.