

Cerebral Venous Thrombosis: Epidemiological, Clinical, And Radiological Aspects; A Retrospective Study At The University Hospital Establishment Of Oran.

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Abstract:

Cerebral venous thrombosis (CVT) is a rare condition related to an isolated dural sinus occlusion or a cortical vein occlusion. We conducted a descriptive retrospective study over a period of 8 years where we collected 250 patients. The results were in favour of a clear female predominance with an average age of 37 years. ICH syndrome was the most predominant symptom and the superior longitudinal sinus was the most affected vessel. CVT is a condition whose diagnosis and management must be early and rapid.

Key words: Cerebral venous thrombosis (CVT), cerebral venous sinus thrombosis, intracranial hypertension syndrome (IHS), contraception, anticoagulants.

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I-Introduction :

Cerebral venous thrombosis (CVT) is a rare condition characterized by isolated occlusion of the dural sinuses or cortical veins (1). It presents with a wide range of clinical and radiological features. Cerebral CT angiography or cerebral MR angiography are used for diagnosis (2). Parenteral anticoagulation is recommended for acute CVT, and decompressive surgery may be considered in cases of cerebral herniation (3). Low molecular weight heparins (LMWH) are preferred over oral anticoagulants during the acute phase (1)(3). Anticonvulsants are suggested for patients with seizures and/or supratentorial lesions (3). There is no significant difference in efficacy between vitamin K antagonists (VKA) and novel oral anticoagulants (NOACs) (4). The duration of treatment is typically 3 to 6 months, unless there are high-risk thromboembolic conditions that require lifelong anticoagulation. The aim of our study is to describe the epidemiological, clinical, and radiological characteristics of cerebral venous thrombosis at the University Hospital establishment of Oran.

II-Materials et methods :

Our study was conducted in the neurology department of the University Hospital establishment of Oran. It was a descriptive retrospective study conducted from December 2015 to December 2022. We included all patients admitted for cerebral venous thrombosis based on clinical and radiological criteria (cerebral CT angiography and cerebral MR angiography). Patients with incomplete medical records were excluded from the study.

SPSS 22 software was used for data analysis.

III-Results :

During the study period, we collected data from 250 patients, with a mean age of 37 ± 14 years and a clear female predominance (84%) (Figure 1). Among the female patients, 64% were using combined oral contraceptives, and 24% were in the postpartum period (Figure 2). The clinical presentation was subacute in 76% of cases. The most common presentation was intracranial hypertension syndrome (82%), followed by motor deficits and seizures. Among our patients, 26% had papilledema, with 11% classified as grade 3-4 (Figure 3). The diagnosis was established based on cerebral MR angiography in 90% of cases (Figure 4). The main site of thrombus formation was the superior sagittal sinus (55%) (Figure 5), with venous hemorrhagic infarction observed in 10% of cases (Figure 6).

Figure 1 : Sex

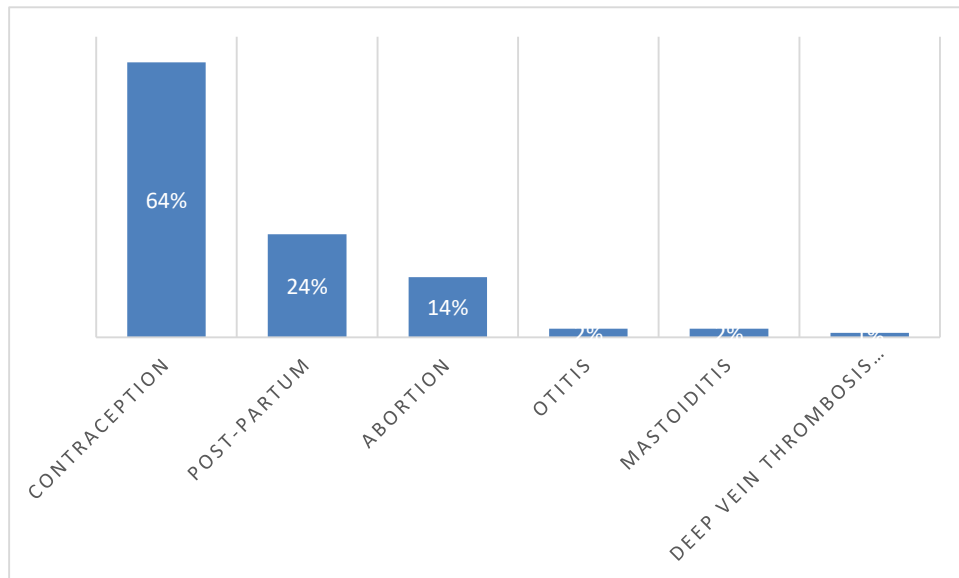
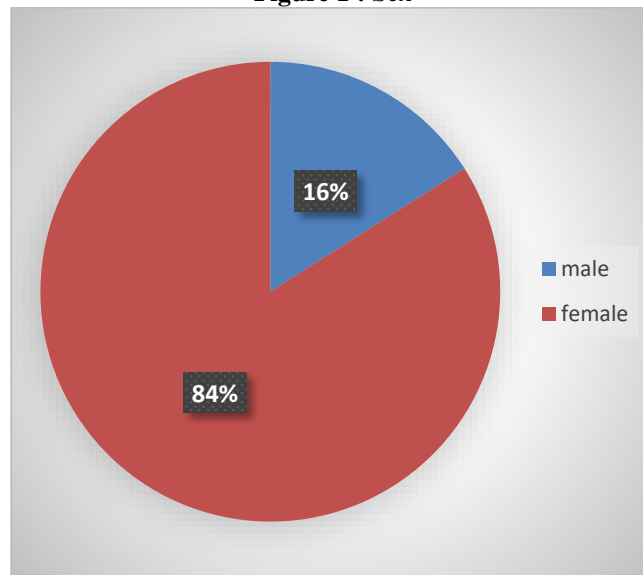


Figure 2 : Risk factors

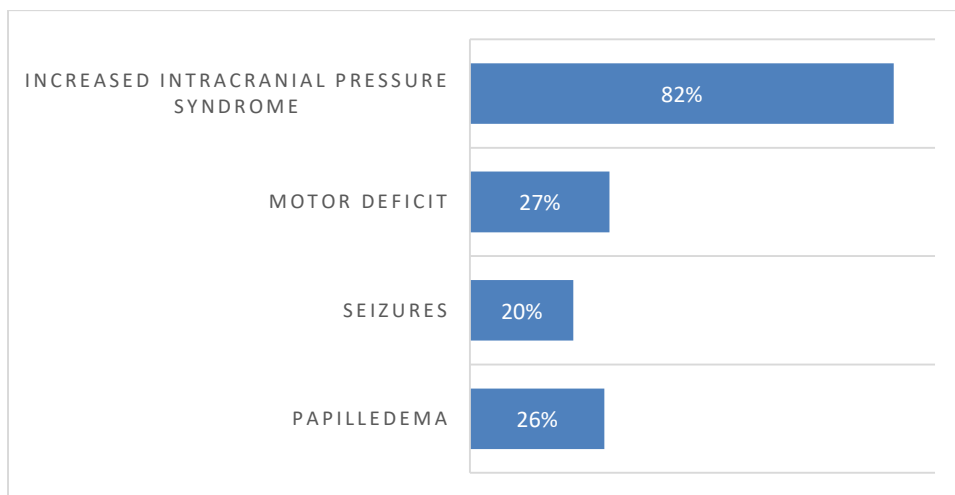


Figure 3 : clinical signs

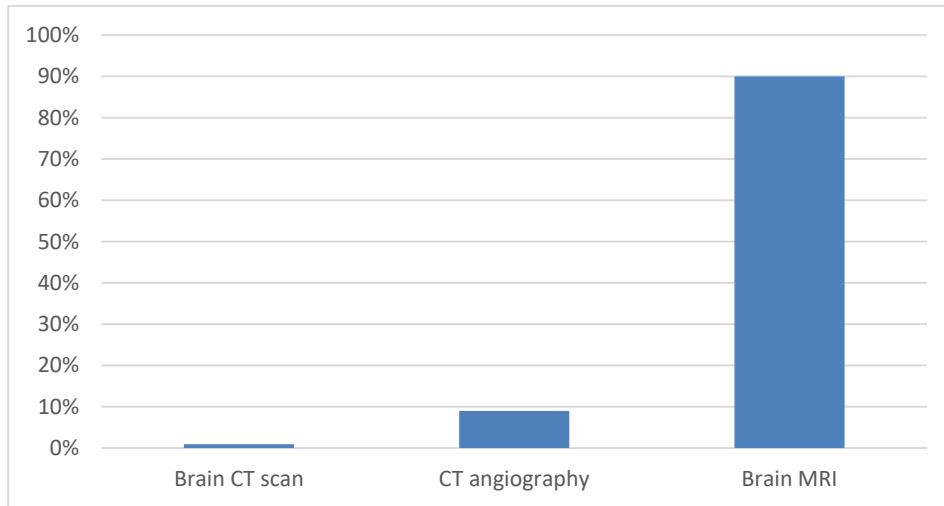


Figure 4 : diagnostic imaging

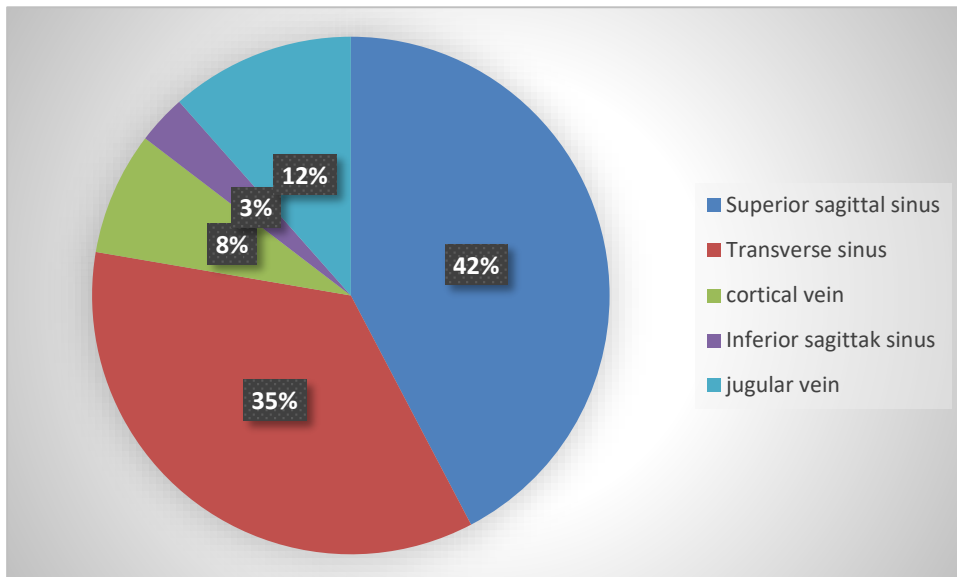


Figure 5 : site

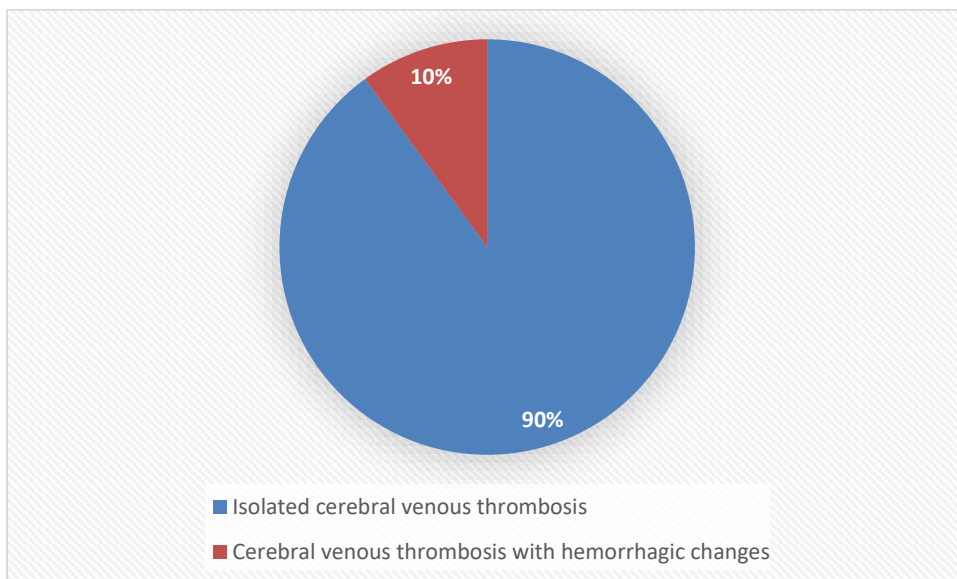


Figure 6 : Imaging results

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