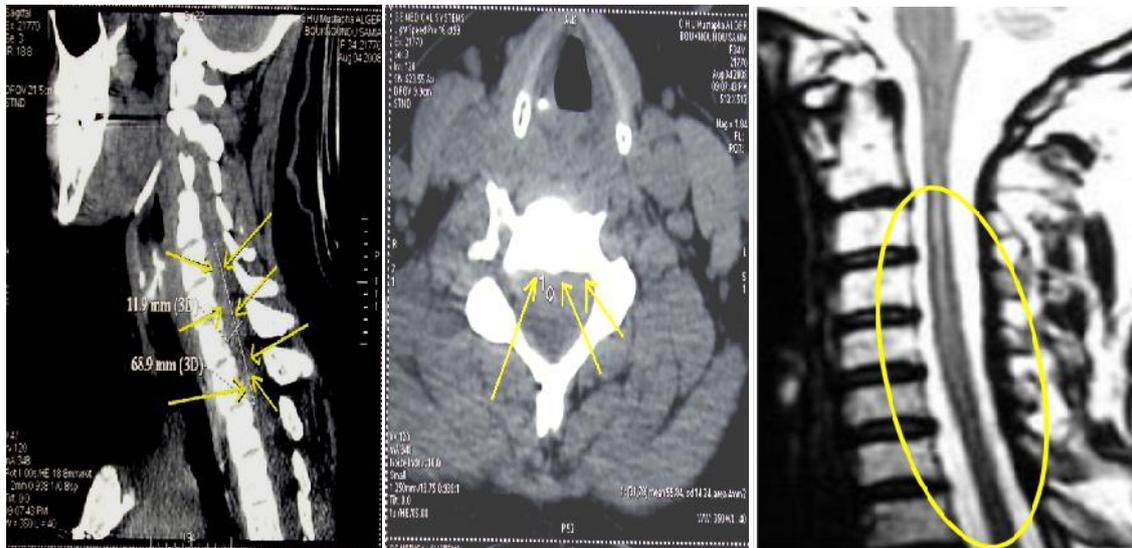


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## EPIDURAL HEMATOMA: EXCEPTIONAL COMPLICATION OF ANTICOAGULANT



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**RESEARCH ARTICLE**

**EPIDURAL HEMATOMA: EXCEPTIONAL COMPLICATION OF ANTICOAGULANT**

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**ABSTRACT**

Accidents with oral anticoagulants have been widely described, but the epidural remains exceptional location in the literature. It represents a diagnostic trap, leading to unusual clinical forms making diagnosis difficult, source of examinations and unnecessary treatment. If the clinic is misleading, imaging has to establish the diagnosis. The objective of this presentation is to highlight the pitfalls that can represent the location, show that getting an early diagnosis can improve prognosis, finally, to give careful reader with dramatic consequences of bleeding in a particular site, the epidural space.

We report the case of a carrier 34 years old patient with a mechanical mitral valve prosthesis (St. Jude), oral anticoagulants such as acenocoumarol (Sintrom) and who, following an overdose of vitamin K antagonist, consulted for febrile neck pain, having initially been discussed meningitis, including imaging (scan of the cervical spine) concluded a epidural hematoma comprehensive cervical C3-C6 without vascular malformation visualization or other cause that could explain the bleeding. Magnetic Resonance Imagery (MRI) performed one month showed a total resorption of hematoma.

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**INTRODUCTION**

Oral anticoagulants are frequently prescribed treatment for various indications. Their bleeding complications are not uncommon, and usually it in the digestive tract, genitourinary and intracranial.

Among the complications reported in the literature, is the spontaneous epidural hematoma, regarded as an exceptional location, characterized on the one hand by its diagnostic trouble and on the other hand, by possible evolutionary complications, in case of late diagnosis, which can be dramatic.

Bone marrow imaging, scan of the cervical spine and MRI medulla, are thus very interesting diagnostic tools.

**Case Presentation**

A young 34 years old patient, treated chronically with acenocoumarol (Sintrom®) at a dose of 2 mg per day following a mitral valvuloplasty rather 3 months (St. Jude type), admitted for persistent neck pain, continuous, sudden onset, disobedient to banal analgesic.

Physical examination revealed a conscious patient, febrile, without deficit signs or sensory disorders, who complained of severe neck pain, and any attempt to mobilize the cervical

spine was impossible. Laboratory tests were not anomalies, outside an INR 7. The brain scan was normal. A cervical spinal cord injury was suspected and CT of the cervical spine then concluded, cervical epidural hematoma at extended from C3-C6 (Figure 1)



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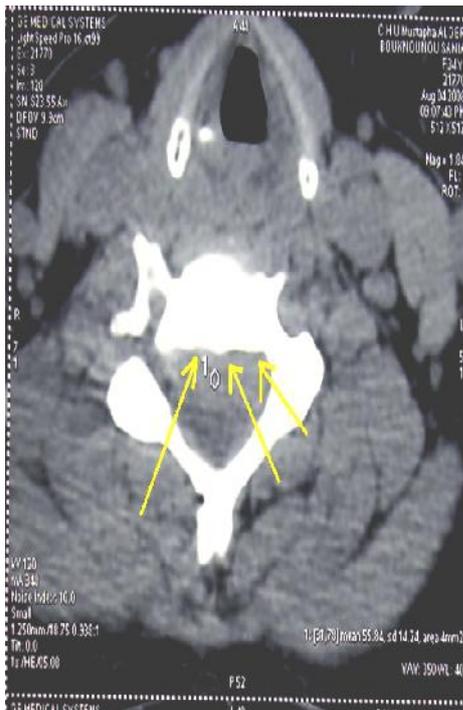


Figure 1 Cervical epidural hematoma at extended from C3-C6

All data, clinical and radiological, and absence of any notion of trauma, were in favor of a spontaneous cervical extramedullary hematoma complicating anticoagulation.

Anticoagulant therapy was stopped, and the therapeutic management was symptomatic corrected INR, development of a cervical neck brace for analgesic and clinical monitoring, biological and radiological.

The clinical outcome was favorable with disappearance of neck pain and cervical spinal MRI performed a month later, revealed a total resorption of the hematoma (figure 2).



Figure 2 total resorption of the hematoma

## DISCUSSION

The epidural hematomas (EH) pose a diagnostic problem, given the rarity of this complication, and to our knowledge, we report in this observation the third case of spontaneous EH to overdose on vitamin K, after the two cases cited by Hentschel [1].

The headquarters of the spinal hematoma perishes predominates to cervicothoracic regions, highly mobile regions including the clinical signs depend on two essential elements are: the location and the size of the hematoma [2, 3].

On the etiological, our patient had no obvious cause for the fall of the TP, and outside any context of trauma, are the causes of EH [4]:

- The coagulopathy and anticoagulant therapy (30%),
- the arterio-venous malformations (4%),
- tumor cases (4%),
- 30-64% of cases, no cause is found.

### The risk factors are

- Ankylosing spondylitis,
- bone and ligament aberrations

Thus, 7 cases in EH in the child with hemophilia [5] have been identified, although hit is a rare complication (2.2 to 7.8%) it is necessary to think about the pain of acute spinal installation and this even before the onset of neurological deficit, and treatment should be started at the end of the extension limit.

Thrombolytic [6] may be responsible for this complication and 12 cases were reported, with an installation period, neurological disorders, averaged 12 hours.

Treatment [7] of EH can be surgical or conservative, depending on the clinical examination, and are considered good prognostic factors, the following:

- a short time between the installation unrest and surgical time (less than 8 hours),
- low compression force,
- a partial deficiency before surgery

Conservative treatment [8] has been tried, and 7 cases of epidural hematoma, which resolved were identified.

The prognosis of EH depends on four essential elements [9]:

- the presence of neurological disorders,
- the severity of neurological disorders,
- rapid diagnosis,
- and speed of the treatment.

Evolutionarily, healing is possible:

It is total in 83% of cases if the deficit is complete, and in 25% of cases in the presence of a complete deficit [10].

## CONCLUSION

Although she is exceptional, this complication deserves special attention, as long as the prognosis is directly related therapy early, so early diagnosis, including spinal imaging, CT or MRI, plays a capital role.

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