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## Digital rectal examination and incision line

To the Editor

I read with interest the article by Sedlak and colleagues [1]. Digital rectal examination would change decision making in patients with lower right abdominal pain. If physicians palpate rectal mass especially in high risk group for malignancy [2], colorectal cancer presenting with abdominal pain must be included among differentials. The appropriate incision in such case is midline rather than at McBurney point.

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## Antivenom therapy is efficient in Viperidae bites, fresh frozen plasma probably not

To the Editor,

We read with a great interest the article of Açikalin et al [1] who report the efficacy of low-dose antivenom therapy in 45 consecutive Viperidae bites in Turkey.

It is of special interest that they report the successful medical handling of a bite in a pregnant patient. Because it has been demonstrated that pregnancy is at risk for fatal evolution in case of envenomation; in this case, antivenom therapy must never be delayed.

Snake bites are certainly responsible for more than 100 000 annual deaths in the world. In particular, a hemorrhagic syndrome is responsible for more than half of the morbidity and the mortality due to snakebites. The hemorrhagic syndrome can associate inexhaustible bleeding bite site, puncture points, or mucous membranes (ulorrhagia, epistaxis, hematuria, digestive hemorrhage, and hemoptysis). Hemorrhagic shock or subarachnoid hemorrhage are causes of death. We observed some cases of abundant intracavitary effusion (hemothorax), but these are atypical localizations.

Viperidae venoms contain many proteins, especially enzymes, which interfere with all steps of hemostasis:

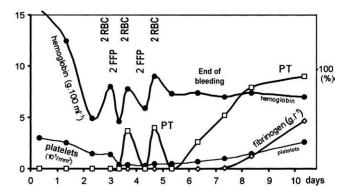
hemorrhagins that induce capillary lesions, disintegrins, and C-type lectins that interfere with platelets and proteins responsible for a "venom-induced consumptive coagulopathy" characterized by afibrinogenemy. Lastly, some enzymes may activate fibrinolysis.

Bleeding or coagulopathy, major loco-regional symptoms (extensive edema or necrosis), neurological or cardiocirculatory disorders are indications to an immediate antivenomous immunotherapy. A lot of studies demonstrated the clinical efficiency of antivenom [2]. Although antivenom should ideally be administered as early as possible, contrary to cobraic syndrome [3], it conserves a constant efficiency on venom-related hemostasis disorders, whatever the time to treatment. However, it seems that there is a weak relationship between antivenom initial dosage and recovery of a normal hemostasis. Indeed, we did not notice any significant difference between an initial dose of 1 or 2 antivenom vials in a cohort study of Echis bites in Djibouti (data under publication).

The data published by Açikalin et al [1] are of peculiar clinical relevance because antivenom supply is a true problem in most countries, and it has been advocated that less than 1% of envenomed patients may benefit for this life-saving treatment. The fact that low doses of antivenom are efficient is thus a very important stake.

On the other hand, several points have to be discussed.

The adverse effects induced by immunotherapy, most dramatic of which is anaphylactic shock, became rare since the use of highly purified immunoglobulin Fab'2 fragments. We do not share the authors' feeling that patients with allergic reactions who do not receive full antivenom therapy would be able to recover. This is probably true



**Fig. 1** Normalization of biologic parameters according to time (days), in a victim of an *Echis pyramidum* bite in East Africa. The patient could not benefit from antivenom therapy because of a supply problem. He presented initially with afibrinogenemy and soon developed thrombopenia. Administration of 2 units of fresh frozen plama (FFP) was attempted by remained inefficient: prothrombin time (PT) transiently reached 40%, but soon returned to baseline. 2 more units had the same effect. Addition of fibrinogen (several grams) was not more efficient. Spontaneous normalization of fibrinogen took one week, and coincided with end of bleeding and hemoglobin stabilization.

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when symptoms remain benign (class 1 of the clinical staging) but may not be the case when patients exhibit a true hemorrhage.

It is particularly our experience [4] that, in case of bleeding, fresh frozen plasma or fibrinogen are completely inefficient (Fig. 1) unless the patient has received prior antivenom therapy.

So, we trust that, in case of anaphylactic reaction, if the clinical situation is severe enough (hemorrhage), the administration of antivenom must be pursued along with the treatment of the anaphylactic shock with intravenous administration of epinephrine.

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