A Worrisome Acute Blue Thumb: A Quiz

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A 75-year-old woman with a past history of sleep apnea, extra genital lichen sclerosus and stroke in 2010 without sequel was referred to our emergency department by her dentist for an acute blue thumb that started the prior evening. Clinically, she presented with a well delimitated dusky non-infiltrated purpura of the thumb (Fig. 1). Thumb and thumb pad were painless. The skin was not cold and asymptomatic to the touch and to pressure. Nail bed was normal without any splinter hemorrhages. Radial and cubital pulses were present. The other fingers were normal, both on the present hand as well as the other hand. She denied any similar episode in the past. She was a non-smoker and never had Raynaud phenomenon. The physical examination was otherwise unremarkable. Upon interrogation, the patient explained that symptoms occurred after opening a tuna can and that the discoloration has remained ever since. She had been taking warfarin for years and her recent INR, taken the prior day to presentation, was within therapeutic range (2, 5).

What is your diagnosis and would you have done any further explorations?

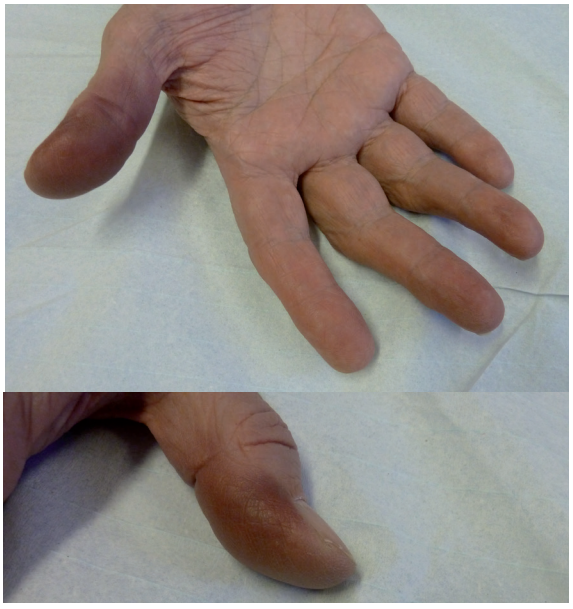

Fig. 1. (A) Well delimitated ecchymotic purpura of the distal phalanx of the thumb. (B) Close-up view.

A Worrisome Acute Blue Thumb: A Commentary

Diagnosis: **Paroxysmal finger haematoma (Achenbach's syndrome)**

Based on the history, the (reassuring) clinical presentation without any argument for local ischemia, the patient was diagnosed with paroxysmal finger (thumb) haematoma, also known as Achenbach's syndrome, which is a benign self-limiting condition caused by a haematoma, spontaneously or after a minor trauma. She was discharged home without any further exploration or treatment. A follow-up phone call 5 days later confirmed that the discolouration was vanishing.

This condition has been first described by Achenbach in the end of the 1950s (1, 2). It affects mainly mid-aged women around 50, who suffer from recurrent attacks of bruising of different fingers of either hands (3). Index or the middle finger are usually affected, rarely others, and more rarely palms or toes. Haematomas arise on areas of proeminent phlebectasias on those areas (2). Even though it is a sporadic condition, some familial cases have been mentioned (2). Attacks usually start by a sharp pain on the volar aspect of a finger either spontaneously or after a minor activity such as turning taps, wringing clothes, or carrying heavy shopping (4) or, as in our case, after opening a can. Some patients felt that it occurred more frequently in cold and humid weather (3). Pain is followed by a bluish discolouration, swelling and numbness. The epidermis is not affected and there is no ulceration or necrosis. The discolouration subsides within the next days to 2 weeks. Of note, in our experience (5) as in others (6), pain is not always present. The frequency of relapses is variable according to patients and to date no clear risk factor except age and sex stands out.

This disease is surprisingly not really known by the medical community. Approximately 40 cases have been reported since its original description (6), but the number of cases may be underestimated. Besides, the multiple names used in the literature such as paroxysmal finger haematoma, paroxysmal haematomas of the digits, acute idiopathic blue finger, finger apoplexy, may contribute to make this condition less known.

Patients are usually referred to emergency departments under the suspicion of an ischaemic attack. Complete physical examination should rule out other acrosyndromes, vasculitis, thrombosis, embolia, Gardner-Diamond syndrome and self-inflicted skin lesions. It is a self-limited condition that does not need more than proper explanations and reassuring attitude. In most of the cases, physician should refrain performing excessive and costly explorations (7) while the clinical presentation is reassuring. In the present case, the patient was discharged without further exploration. No treatment is necessary. At most, a moisturizing cream or a heparin cream can be prescribed.

References

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Answers to CME on page 27–28

Case 5: 3 (bleeding ridge pattern)
Case 6: 3 (extension lines in the naevus)
Case 7: 3 (ovoid nests, crusts, twisted capillaries)
Case 8: 3 (pseudopods/streaming, blue-white areas, regression)