A child with a necrotic finger

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DESCRIPTION

A 1.5-year-old girl developed necrosis of her right little finger over a 2-day period (figures 1 and 2).

In the preceding weeks, she had suffered from intermittent fever, lethargy and weight loss, which was considered to be symptomatic of a viral infection. Subsequently, she developed subcutaneous palpable nodules and progressive pain of the extremities. Repeated full blood counts showed increasing signs of inflammation, namely high erythrocyte sedimentation rate (124 mm), anaemia (haemoglobin 4.7 mmol/l) and thrombocytosis ($530 \times 10^9/l$). Extensive diagnostic tests for infections revealed only an increase in antistreptolysin O titre (360 IE/ml). Autoimmune serology was negative (ie antinuclear antibody, antinuclear cytoplasmic antibody). Systemic examination showed no signs of organ dysfunction due to vasculitis. Biopsy of the affected finger was not performed because of the risk of biopsy-induced necrosis due to active vasculitis in endarteries. An underlying malignancy was excluded by bone marrow histology and urine analysis.

The diagnosis cutaneous polyarteritis nodosa (C-PAN) was made based on clinical signs, triggered by a group A β -haemolytic streptococcus.^{1 2} She was successfully treated with methylprednisolone pulse, prednisolone maintenance therapy and azathioprine. In light of the compromised vitality of the finger iloprost, a prostacyclin analogue was started. She lost the tip of the affected finger, although the nail bed was spared (figures 3 and 4).

CONCLUSION

C-PAN is a rare disease in childhood. Patients can initially present with vague and common symptoms such as fever and lethargy. Prompt diagnosis is crucial, as C-PAN may cause irreversible damage due to necrotising vasculitis. Paediatricians should be aware of this diagnosis.

Figure 2 The necrotic little finger of her right hand at a later stage. Bandages around the insertion place of intravenous infusion.

Figure 3 The little finger of her right hand after therapy.

Figure 1 Necrotic little finger of her right hand, with subcutaneous palpable nodules visible on the distal interphalangeal joint of her middle finger and proximal interphalangeal joint of her little finger.

Figure 4 The little finger of her right hand after therapy.

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Learning points

- ▶ Always be aware of rare autoimmune diseases, when children initially present with common symptoms.
- ▶ Prompt diagnosis of cutaneous polyarteritis nodosa is necessary to prevent irreversible damage.

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