

Images in clinical medicine



Forearm compartment syndrome with gangrenous fingers following a snake bite

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Forearm compartment syndrome with gangrenous fingers following a snake bite

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Image in medicine

A 9-year-old boy presented to the emergency department after being bitten by a snake on the middle finger of the right hand while reaching for his toy car under a heap of fallen dry branches of tree. He complained of severe pain, progressive swelling, darkening of his hand's skin and inability to use the limb for 3 days. Local examination revealed an extensively swollen and tense right upper limb from the fingers to the level of the shoulder. The right third and fourth fingers were black in colour, and with blisters on the dorsum and palm of the hand (A,B). There was significant tenderness on palpation and the muscles were very tense. There was significantly reduced range of movement, and increased pain on passive flexion

and extension of both finger and elbow joints. Radial pulse was not appreciated. Diagnosis of compartment syndrome with gangrenous fingers was reached based on the above clinical findings. He was initiated on doses of antivenom and other supportive care but he did not improve clinically. Fasciotomy was performed under general anaesthesia with incision on the volar aspect of right forearm and dorsum of the hand (C). Compartment syndrome is a rare complication of

snake envenomation to the limbs. In low resource settings its diagnosis is mainly through early detection of clinical signs and symptoms. Administration of antivenom in additional doses together with other supportive care is the first line of treatment. Unlike trauma, in compartment syndrome following snake bites fasciotomy is only considered when compartment pressures are persistently elevated despite sufficient treatment with antivenom.



Figure 1: forearm compartment syndrome with gangrenous fingers following a snake bite