

CHICKENPOX CAUSING DIGITAL OR PERIPHERAL GANGRENE (A case report)

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Summary

Digital gangrene, a rare complication of chicken-pox case has been presented and discussed in the light of available literature.

Complications of chicken-pox are too varied, but gangrene is extremely rare. Rarity of the condition and scarcity of literature prompted us to report this case.

Case Record

Eight year old, Hindu, female presented with a history of fever and rash all over the body of ten days duration and black discolouration of toes of right foot of two days duration. Patient had severe burning pain in both feet and was unable to sleep.

Physical examination revealed normal growth of child with pulse rate 94/min, temperature 99.2°F and had typical centripetal polymorphic rash all over the body. Systemic examination did not reveal any abnormality and peripheral pulsations were also normal. Examination of the right foot showed gangrene at the tip of toes (Fig. 1) and patchy discolouration of skin of the dorsum of foot. Both the feet were comparatively cool.

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Fig. 1

Showing gangrene of all toes with discolouration of the skin of dorsum of right foot.

Laboratory investigations such as ESR, TDLC, BT, CT, platelet count, prothrombin time and urine examination were within normal limits. Patient was treated with local dressings, vasodilators and anticoagulants. Within a few days, the gangrenous tips of toes separated away and wound healed in three weeks time.

There was no evidence of any other disease apart from the chickenpox.

Discussion

The rarity of the condition is evidenced by the fact that Wishik and Bullowa¹ could record only one case of digital gangrene in a series of 2,534 cases of chicken-pox between 1929 and 1933. On the other hand Lewis and Pickering² while describing digital gangrene in young subjects failed to record such an incidence.

Gangrene usually occurs in the second week and affects the peripheral parts of the extremities. The probable mechanism for this complication is damage to endothelial lining of the peripheral vessels as a result of viral infection (Cheatham³). This in turn leads to aggregation of platelets and thrombus formation. Mehrotra and Mitra⁴ labelled the probable cause of gangrene in their case as venous occlusion. In the present case, we presume that the probable cause of gangrene was digital vessel thrombosis which lead to severe burning pain and coldness of toes.

REFERENCES

1. Wishik SM and Bullowa JGM: Quoted by - 4. with necropsy, virus isolation and serologic studies *Am J Path* 32: 1015, 1956.
2. Lewis T and Pickering GW: Quoted by-4.
3. Cheatham WJ, Weller TH, Dolan TFF et al: Varicella report of two fatal cases
4. Mehrotra TN and Mitra HS: Gangrene after chickenpox *J Ind Med Assoc* 58: 14, 1972.

TRUE or FALSE

A depression of Extraoculogram (EOG) during chloroquin therapy is an early indication of chloroquin retinopathy which warrants discontinuation of therapy.

(Answer page No. 162)