TROPICAL DIABETIC HAND SYNDROME – A CASE REPORT

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Abstract : *The present case in a 45 year old male is aimed at highlighting the clinical specturim, predisposing factors, importance of hand care in prevention and prompt treatment with effective antimicrobials treatment. The condition is rather uncommon as compared to diabetic foot; neuropathy and vasculopathy may not be significant cotributory factors.*

INTRODUCTION

Diabetes Mellitus (DM) is the commonest metabolic disorder.1 Its vascular and neurologic complications are seen mainly in adults, usually involving the lower limb to cause foot ulcers.[2,3] Hand ulcers/infection complicating DM is relatively rare and has been termed - 'Tropical Diabetic Hand Syndrome' (DHS). This syndrome has been described in western world and some tropical countries [2,4,5]. The development of hand ulcers may or may not be associated with any evidence of neuropathy or arterial insuffficiency. Trivial truama to the hand, poor glycemic control and application of herbal medicines are important predisposing factors.[2]

CASE REPORT

A 45 year old male from poor-socio-economic class, nonalcoholic-nonsmoker, labourer by occupation who had type 2 DM for 8.5 years noticed swelling and cellulitis of left hand with severe pain as well as gangrene of left index finger with evidence of gangrene involving left middle and index finger as well since 2 weeks. Left thumb and little finger was spared. Right hand was normal. He was on irregular treatment for DM. He had difficulty in clenching fist. There was no history of trauma, bluishness nails, joint pains, snake bite or application of local herbal medicines. All sensations over left hand were normal and there was no thickening of nerves. His laboratory data revealed Hb 8.9%, TLC 16500/mm^3, DLC P80 L18 E1 B1, ESR 30mm/first hr. FBS 160 mg/dl, PPBG 230 mg/dl., B urea 30 mg/dl, S. creatinine 1.2 mg/dl, ECG-NAD, HbAIC 9.2%. Deep wound swab taken from left index finger revealed after microbiological analysis growth of staphylo-coccus aureus organisms. X-ray of left hand showed soft tissue swelling without evidence of osteomyelitis. Doppler study of left palmer vessels showed marked narrowing with thickened echogenic wall.

He was put on insulin therepy, appropriate antibiotics and antitetanus serum. Amputation of left index finger was done (after obtaining written informed consent) with debridement and wound graft of left middle and index fingers. The patient was discharged on request but was lost on follow up.

DISCUSSION

Hand ulcer/infection is an increasing cause of morbidity and mortality among adult diabetics [2,3]. It follows trivial trauma in poorly controlled DM and is worsened by application of local herbs, self treatment and late presentation to hospital. Various workers, have reported prevalence of DHS to the tune of 4% and 1.6%[2,5] respectively especially occuring in adult females5,6. But Sarita Bajaj and AK Bajaj[7] in their study have reported equal prevalence of DHS amongst male and females. In addition use of traditional medicines including local application of herbs to wounds, self medication and visits to spirtualist on account of poverty and ignorance may lead to increased prevalence of DHS As our patient was labourer by profession and from poor socio-economic class, so trival trauma and late presentation to us because of ignorance might have led on to existing hand problem. Probably this may be the first rare case from this part of country. Hence it is reported.

CONCLUSION

Tropical diabetic hand syndrome (DHS) is relatively rare. The present case highlights that there is great need of awareness on the part of medical fraternity regarding frequent association of hand ulcer with diabetes. Hand care needs to be emphasized just like foot care and guidelines must be framed for the care of both hands and feet in a developing country like ours where people are still ignorant about hand ulcers.

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