A CASE OF MISSING FOOT
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A CASE OF MISSING FOOT (Abstract): Auto-amputation is spontaneous separation of nonviable
tissue, commonly seen in atherosclerotic dry gangrene and diabetic patients. Aggressive
surgical debridement, amputations, parenteral antibiotics, maintenance of nutrition, control of diabetic
status and postoperative wound care are the mainstay treatment in such cases. Here we present a unique
case of spontaneous disarticulation of foot from ankle joint in a non diabetic patient and discuss the
possible causes for the same.

KEY WORDS: AUTO-AMPUTATION, GANGRENE, ATHEROSCLEROSIS

INTRODUCTION
We would like to present a case of spontaneous auto-disarticulation of foot from
the ankle joint in a poor, malnourished, non diabetic, self neglected individual. Very
few cases of auto-amputation of lower limbs have been reported in the literature.

CASE REPORT
A 75 years old man was brought to the emergency department by the local
police as he was found lying by the road side. On enquiry he was found to be a beggar
and that he had ‘lost’ his right foot about a week back, he could not remember where.
He complained of pain in his both lower limbs, particularly in the region of calf muscles
while walking, since two years, which progressively increased forcing him to take rests
in between. Subsequently around six months back he developed painful ulcerations over
his right foot which progressively increased in size and the surrounding areas became
blackish in colour. He also complained of swelling of his right foot for the past month
with purulent and watery discharge. He had no fever during this period nor was there
any history of trauma.

He was a smoker for the last 20-25 years and used to smoke ‘beedi’, 2-3 packets
a day. A beedi (pronounced bidi), from Hindi, is a thin, South Asian cigarette filled with
tobacco flake and wrapped in a tendu leaf, tied with a string at one end [1].

On examination the patient was frail, emaciated, dehydrated, anaemic and with
poor nutrition. He had a pulse rate of 108/minute in the radial artery with a blood
pressure of 90/60 mm of Hg.

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He had moist crackles on chest examination bilaterally and the other system examinations were unremarkable. He had SpO2 of 78-80% at room air.

There was spontaneous disarticulation of his right foot from the ankle joint (Fig. 1) with sloughed, necrosed and infected muscles and other tissues exposing the bone at places forming an ulcer involving almost the whole of right leg. There was a sharp demarcation between the ulcerated and the non ulcerated areas. There was a blackish area of skin over the right knee anteriorly over the patella.

Both the lower limbs felt cold to touch, skin was thin, and there was loss of hair. Femoral pulses were very weak bilaterally and no peripheral pulses were palpable beyond that in both the lower limbs. No subcutaneous crepitus was felt in the right lower limb.

On the basis of the above, a clinical diagnosis of atherosclerotic dry gangrene with superadded secondary infection leading to moist gangrene and spontaneous disarticulation of the right ankle was made.

He was resuscitated with IV fluids, oxygen inhalation, both active and passive tetanus prophylaxis, broad spectrum antibiotics including metronidazole. Investigations revealed Hb-8g%, total leucocyte count of 17,500 with polymorphs of 85%. Renal profile showed serum urea to be 180mg% where as serum creatinine to be 4.5 mg%. Serum albumin was low at 2g%, blood glucose was 104 mg%, serology for syphilis was negative and chest X-ray showed features of COPD with pneumonitic patch over the right mid zone. Resting ECG was within normal limits except for sinus tachycardia.

The patient was informed about the diagnosis and need for the formal amputation through the mid thigh and after obtaining informed consent he underwent a formal guillotine mid thigh amputation under regional anaesthesia. Tissue was sent for culture and sensitivity from the operation theatre. He was managed with antibiotics and dressing in the post operative period and received two units of cross matched compatible whole blood. But even though he was maintaining just adequate urine output initially, his renal function deteriorated progressively and developed fever in the post operative period. He subsequently death on the 6th postoperative day, due to sepsis and renal failure.
DISCUSSION AND CONCLUSIONS

Spontaneous separation of non-viable from viable tissue is called autoamputation and is commonly associated with dry gangrene, usually occurring in the distal portions of the lower extremities [2]. Even though it is an uncommon phenomenon, it has also been reported for carcinoma penis [3], vermiform appendix [4], breast [5], tongue [6]. Others reporting auto-amputation of limbs include gas gangrene [7], diabetes and atherosclerotic gangrene [2], following treatment of chronic leg ulcers by traditional bone setters [8] as the other causes. Spontaneous dactylynosis results in spontaneous auto-amputation of toes secondary to the formation of a constricting band and usually affects the fifth toe bilaterally [9].

Our patient had a typical history of gradual vascular occlusion leading to ischemia progressing to dry gangrene. He was a non diabetic, non syphilitic and did not have any other systemic illnesses. He probably had minor injuries to his foot while walking barefooted and being immunologically compromised had his dry gangrene converted to wet type which eventually accelerated the process and led to spontaneous disarticulation of foot from the ankle.

In atherosclerotic gangrene spontaneous separations usually start at the periphery from the digits and toes and may eventually lead to disarticulation of ankle [2]. In our case the patient straight way lost his foot from the ankle joint, probably due to the secondary infection leading to wet gangrene. Treatment at a traditional bone setter for an ulcer in the leg by herbal application of concoctions in local gin and herbal dressings lead to infections, contractures and ultimately spontaneous loss of foot [8], which also shows that, a wet gangrene can also lead to auto-amputation or spontaneous disarticulations of limbs.

Moist or wet gangrene is thought to be more dangerous than the dry variety and requires early surgical intervention depending upon the extent, nature, area of involvement as well as the general condition of the patient. Excision, debridement and amputation are the surgical procedures of choice in such a situation. Our patient also underwent a mid thigh amputation after proper resuscitation and antibiotic coverage and tetanus prophylaxis. But unfortunately we lost the patient due to sepsis and progressive renal failure on the 6th postoperative day. Inequitable access to conventional healthcare for such people of lower economic strata, lack of awareness, poverty, apathy, self neglect were probably also the contributing factors leading to this condition of “missing foot” and ultimate death of the patient.

REFERENCES
