CONCOMITANT OFF- PUMP CABG & BELOW KNEE AMPUTATION IN A PATIENT WITH CRITICAL LEFT MAIN CORONARY ARTERY DISEASE AND SEVERE SEPTIC DIABETIC FOOT- A CASE REPORT

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ABSTRACT

Critical Left Main coronary artery disease with Severe LV Dysfunction with a Septic diabetic foot and anemia is a challenging clinical problem. In such patients, if angioplasty is not feasible, treatment can be proceed in a staged or a combined operation. We present the case of a patient operated for below knee amputation and off pump CABG as a one-stage procedure.

CASE REPORT

A 57-year-old man presented with complaints of angina and diabetic foot on Right leg (Figure 1) with Uncontrolled diabetes. Right foot was found to be severely edematous with no pulsation and he was grossly anemic. Preoperative coronary angiography showed Distal Left Main stenosis, proximal total occlusion of left anterior descending artery (LAD), Proximal 80 % stenosis of Dominant left circumflex and the diffusely diseased Non dominant right coronary artery (RCA). On routine Echo-cardiogram LV was found to be severely impaired. X-Ray of foot showed neuropathic joint (Figure 2). The Computed Tomography (CT) of Lower limb revealed severe lesions in Right Anterior Tibial and Posterior Tibial arteries with Multiple Abscesses on Right foot with bone degeneration. Carotid Doppler showed Right Internal carotid artery 70% stenosis and Left Internal Carotid artery 40 % stenosis.

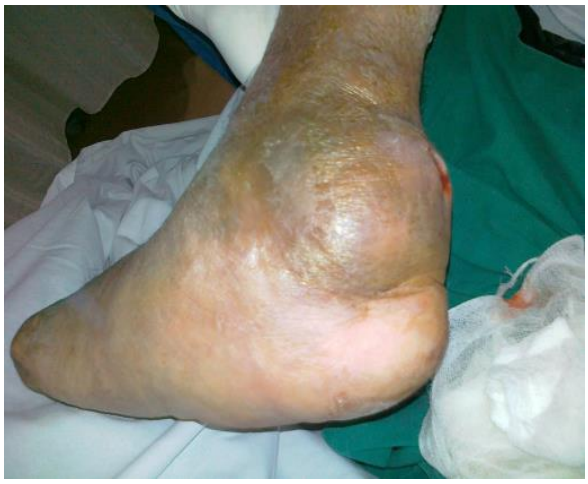

Figure 1

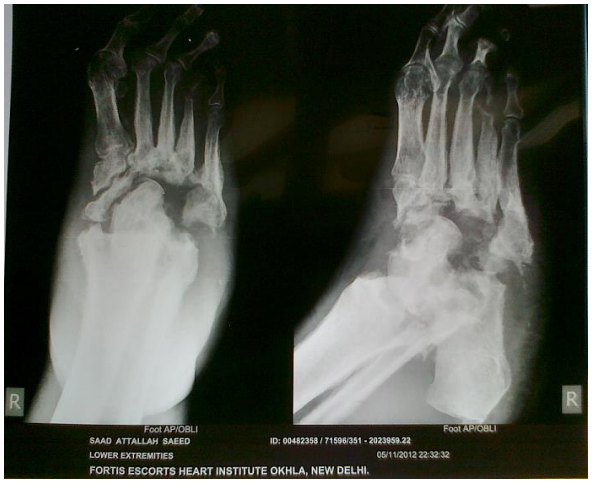

Figure 2

As the leg was severely infected with multiple abscess and Critical coronary pathology with Severe LV dysfunction, it worsened the scenario and became more life-threatening. Since he had Persistent Angina Pectoris symptoms, it was decided to do right Below knee amputation with Coronary Revascularization in Single Stage to improve his quality of life.

After routine induction, Right Below knee amputation was done by Orthopedic team. Intra Aortic Balloon Pump was inserted in view of Severe LV dysfunction. Through a standard median sternotomy LAD, Ramus Intermedius and second Obtuse Marginal branch of the Circumflex were bypassed on beating heart using Saphenous vein grafts. The left internal mammary artery (LIMA) was not used in view of severely impaired LV, akinetic anterior wall and calcific LAD. Post operatively his WBC counts and Procalcitonin levels were normal with Effective course of antibiotics and patient was discharged on the 7th postoperative day.

DISCUSSION

Concomitant CABG and below knee amputation are uncommon. Coronary angioplasty, if feasible, should be the first choice of therapy for such patients. Some studies suggest that staged operations are preferable because of shorter operation time and less technical complexity; accordingly, only patients who cannot be waited pathologically and symptomatically upto a second operation should undergo a combined procedure (1). However, the time delay in staged operations with Critical Coronary Disease may result in worsening ischemia (2, 3) and may be fatal who are treated for diabetic foot first. On the other hand, if the CABG operation is carried out first, it may result in spreading of infection throughout body which may end up in septicemia. Additionally, the need for a second operation means, overall, longer hospital stay and higher costs. For these reasons, combined surgery that includes off-pump CABG is becoming more common

In a combined operation, below knee amputation should be done first, because the chance of spreading of infection is high, but should be prepared to do Emergency CABG too because of Critical CAD. Sequencing the procedures this way reduces postoperative morbidity and mortality. To the best of our knowledge, simultaneous surgical management as presented in this case has been rarely reported.

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