Reconstructive Approaches for Traumatic Composite Bone and Soft Tissue Loss of the Leg: Are we speaking a common language?

Mahmoud Abdel-Monem El-Rosasy¹

¹Tanta University Hospital/Ortho Surgery

INTRODUCTION:

Introduction: Reconstruction of traumatic bone and soft tissue loss (TBSTL) is a great challenge due to several factors including increased road traffic accidents, especially in developing countries, late presenting cases with deep wound infection, and factors related to the injury like vascular compromise which impede pedicled- or free-flap reconstruction; moreover, the effect of the initially instituted surgical interference would influence subsequent trials at reconstruction.

Several approaches for the reconstruction of TBSTL have been described. Despite this, there is a lack of clear guidelines regarding the most suitable treatment for every case scenario in terms of description, classification, algorithm for management, prognosis, and outcome measurement.

Aim of the study: the introduction of a new classification system and treatment algorithm for the management of TCBSTL of the leg whether infected or not.

METHODS:

Materials and Methods: in the past 20 years there were 300 cases of TCBSTL of the leg that were treated in the author's department according to our protocol.

RESULTS: Based on this experience, a classification system and management algorithm were formulated and their outcome was analyzed. Our classification for TCBSTL of the leg is based on 1) stability of the host bone (consolidated bone or a well-fixed fracture Vs. unstable Fx.); 2) infection of the host bone (Ch. O.M.); 3) size of bone defect; and 4) Contamination of the medullary cavity.

DISCUSSION AND CONCLUSION:

Discussion: The proposed classification provides a universal system of evaluation, technique selection criteria, and outcome measurement tools. This would improve our patients' management and treatment and set a common communication language among reconstructive surgeons.