"Traumatic Composite Bone and Soft Tissue Loss of the Leg: Region-Specific Classification and Treatment Algorithm."

Learn from the Author !

***Dr.* Mahmoud El-Rosasy, MB ChB, MSc, MD.**

Professor of Orthopaedic Surgery & Traumatology
Limb Lengthening & Reconstruction and Paediatric Orthopaedics
Faculty of Medicine - University of Tanta - Egypt

WAIOT Member since 2018

EOA Board member
AAOS affiliate member
SICOT active member

Mailing address: Dr. Mahmoud El-Rosasy
Department of Orthopaedic Surgery Tanta University Hospital Al-Geish Street Tanta - Egypt
Tel: +201121033391 e-mail: elrosasym@yahoo.com

Q1: Dear Prof. El-Rosasy, can you briefly explain to the WAIOT Members what is your professional activity and the reason why you specifically focused on bone and joint infection management?

A: Since I registered for the PhD in 1996, I have been working on limb reconstruction and paediatric orthopaedics, mainly using Ilizarov fixator and techniques. Due to the **overwhelming number of road traffic musculoskeletal injuries**, I deeply indulged in post-traumatic limb reconstruction, mainly dealing with **post-traumatic deep infection**.

Q2: Are you able to estimate the number of new bone and joint infections in Egypt every year, including osteomyelitis, post-traumatic and post-surgical bone and joint infections, peri-prosthetic joint infections?

A: To the best of my knowledge no such data are currently available.

Q3: Are there any data concerning the incidence of post-surgical infection in orthopaedics in Egypt ?

A: An interesting study on surgical site infection after orthopaedic surgery has detected **overall SSIs rate of 25.8%** (from 4.1% in clean wound to 66.7% in dirty contaminated wounds). [cf. Khaleid M. Abdel-Haleim, Zeinab Abdel-Khalek Ibraheim, Eman M. El-Tahlawy. Surgical Site Infections and Associated Risk Factors in Egyptian Orthopedic Patients, Journal of American Science 2010;6(7):272-280.]

Q4: What are the main problems for bone and joint infection management in Egypt ?

The major problems in the management of bone and joint infection include the **increasing bacterial resistance** to most available antibiotics which pose a great challenge to the antimicrobial policies. Another major obstacle to adequate and timely management is the **limited resources for such lengthy and costly treatment**.

Q5: What are the strong and the weak point of your classification system of bone and soft tissue defects ?

A: Our classification system and treatment-algorithm were devised in a manner to **include most scenarios of composite bone and soft tissue loss of the leg**

whether infected or not. Because surgeons' experience and training are variable, the algorithm provides the treating surgeon with **different choices of surgical approaches for the same case scenario**. The classification and algorithm are **concise, clear and recallable** and should establish basis for a common language among limb reconstruction surgeons.

However, **a limitation of the present system resides in its being "region-specific" and specific to leg reconstruction**.

Q6: Do you think a similar classification could be applied to regions other than the leg ?

A: Yes, we believe that it is necessary to devise region-specific approaches because **what is suitable for certain body region does necessarily apply to others due to several factors including anatomical and biomechanical differences**.

Q7: What are the main focus of your research at the moment?

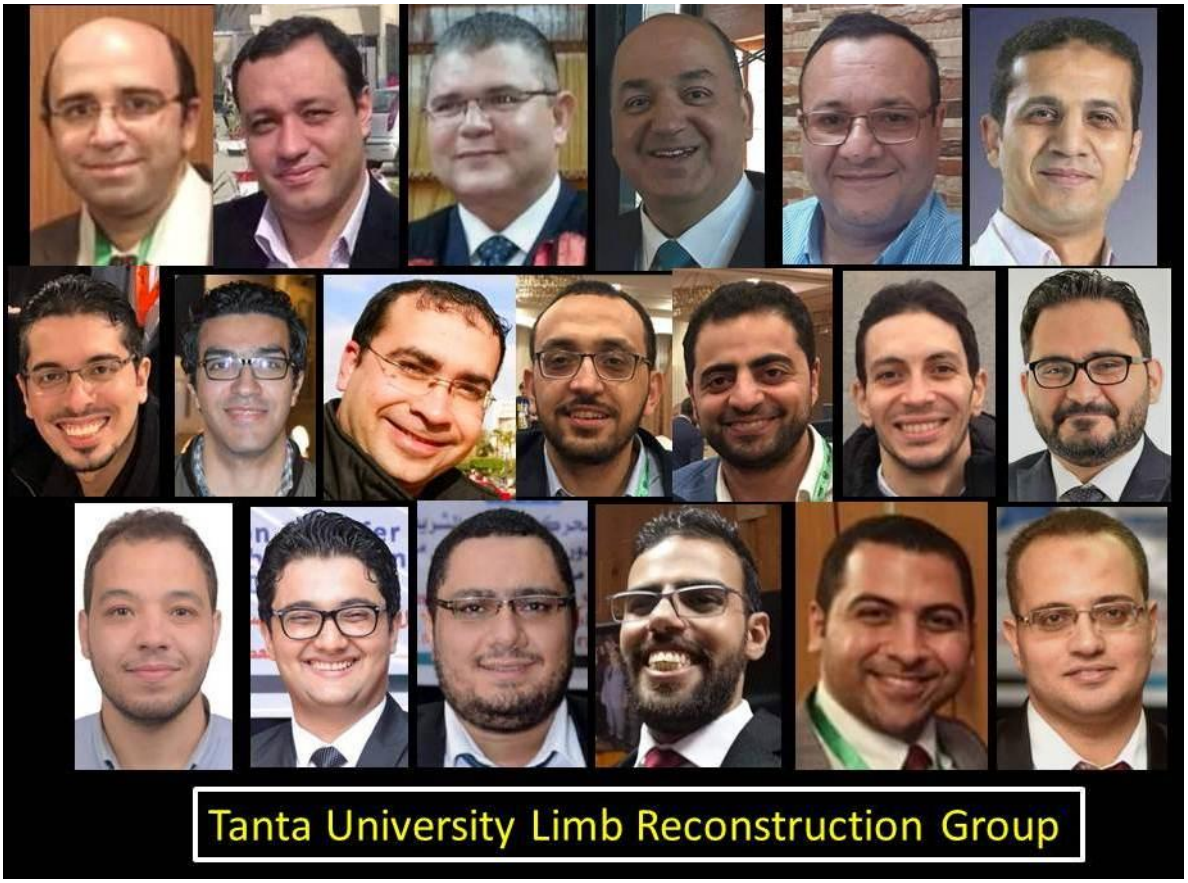
A: Our research work is focused currently on the **initial management of severe open fractures**. How to optimize initial soft tissue management utilizing the concept of **acute limb shortening and subsequent lengthening**? Such approach would minimize the need for technically demanding soft tissue coverage procedures.
Moreover, we are developing **a protocol to minimize implant-related infections in acute limb injuries** which are fixed on emergency basis**.**

Q8: In your opinion, what a the most urgent needs that should be addressed in Egypt to improve bone and joint infection prevention, diagnosis and treatment ?

A: To **improve the awareness among medical and paramedics** on the proper OR environment **through short-term intensive educational courses.**

Increase the **training courses to improve the surgical skills of the junior orthopedists.**

Development of **emergency protocols suitable to limited-resources hospitals** with the goal of keeping treatment-related complications to minimum.


Tanta University Limb Reconstruction Group


EUROPE
ASIA
Egypt
AFRICA
EQUATOR
Atlantic Ocean
Indian Ocean
© BeautifulWorld.com
Mediterranean Sea
Tanta
EGYPT
Alexandria
Cairo
Suez
Nile River
Luxor
Aswan
Aswan High Dam
Lake Nasser
Red Sea
Greetings from Tanta, Egypt