An International Perspective on Extremity Injury Secondary to Gun Violence: Optimizing Care and Outcomes

Organized by:
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📅 Thursday 3 March & Friday 4 March 2022
📍 The University of Chicago Center in Paris
   6 rue Thomas Mann, Paris 13e
Thursday 3 March - 13:00-17:00

13:00 Welcome/Introductions/Overview – J. Wolf, J. Strelzow, L. Mathieu

13:30 Setting the Stage – Gunshot Trauma – J. Strelzow
   Adult and pediatric data
   Intentional trauma only

14:00 Pre-Hospital Care of the Gunshot/Trauma Patient - International Perspectives (10 min talks each)
   Shai Luria – Israel
   Yann Daniel – France
   Jason Strelzow – US
   Scott Tintle – US Military
   Panel Discussion

15:30 Break

16:00 Acute Care of Ballistic Trauma – Military vs Civilian (10 min)
   K Wilson – Life vs limb – the general surgery perspective
   L. Mathieu – Military – Stabilization differs
   J. Wolf – Civilian Care – Open vs Ballistic Closed Injuries - definitions
   Shai Luria – Ballistic/terrorist injuries – how are these different?

17:00 Wrap-up
Friday 4 March - 9:00-15:30

9:00  Secondary Care after Gunshot Wounds
      Surgical Next Steps – Ken Wilson and Jason Strelzow
      Transport and Stabilization – Scott Tintle
      Therapy and Rehabilitation- Stéphanie Truffaud
      Psychological Impacts – Stephanie Vandentorren
      PTSD & Interdisciplinary Care /Patient Shared Decision-Making – Marie Boussard

10:30 Break

11:00 Panel Discussion (30 min each topic)
      Mental Impacts and PTSD Vandentorren/Boussaud
      Trauma System Differences Luria/Tintle/Mathieu/Wilson

12:00  Break

12:30 – 1pm KEYNOTE PRESENTATION
      Chris Moran (Professor, Trauma Surgery, Univ of Nottingham, UK) Systems not Surgeons Save Lives

13:00 Interventions – How to Improve Outcomes in Gunshot Victims?
      Optimized Timing: Tonight or tomorrow? Damage control or definitive care
      Jennifer Wolf - tomorrow
      Laurent Mathieu - tonight

      Orthoplastic reconstruction/vascularized bone graft for segmental injuries
      Scott Tintle

      How to identify acute mental impacts. Can you prevent/mitigate PTSD?
      Stephanie Vandentorren - identifying PTSD in time
      Marie Boussard – pre-conditioning early medical treatment

      Managing nerve injuries – medicine/surgery/therapy?
      Jason Strelzow

      Resources & ethics – what do we need to be most effective?
      Ken Wilson - Resource planning & optimal care protocols
      Shai Luria – who to take care of first?

15:30 Wrap-up & Next Steps (Wolf, Strelzow, Mathieu)
Narrative

The University of Chicago Hospital recently opened a Level I adult trauma center, resulting in subsequent increases in the number of patients presenting with trauma due to the gun violence from the neighborhoods surrounding the UChicago campus. Since the trauma center opened, it has quickly become one of the busiest centers in the city of Chicago, as well as the nation. As orthopaedic surgeons, we are treating injuries to the upper and lower extremities secondary to gunshot injuries, including bone fractures and major nerve injuries. Evidence for optimal care of these unique injuries is primarily based on limited historic studies. Additionally, little is known about interventions that can impact physical and psychological outcomes. In North America, victims of gun violence are transported to trauma centers for stabilization, while in Europe, advanced stabilization occurs in the field prior to transfer for hospital level care. In addition to addressing gunshot injuries, care modalities, and interventions, there is a severe lack of data regarding post-traumatic stress disorder (PTSD) secondary to gun violence in the US and Europe.

We propose a first of its kind international conference centered on urban ballistic extremity injuries, treatments, and outcomes. This conference would be facilitated primarily between the University of Chicago and Ecole du Val-de-Grâce, Paris, France; however, experts from North America, the Middle East, France, and Croatia will be invited to the Center in Paris to participate in discussions around novel treatments and share professional experiences. The focus of this collaborative conference will be on the epidemiology of ballistic trauma, interventions to improve nerve recovery, and mental health after gunshot violence.

Specific Aims

1) Learn whether advanced pre-hospital care of gunshot injury patients is correlated with improved functional outcomes in extremity injuries.
2) Explore the role for surgical timing and options for treatment of nerve injuries in gunshot injuries.
3) Discuss the psychological effect of ballistic injuries on victims and potential differences in management with improved social and victim recovery programs.
4) Evaluate differences in epidemiology of fracture type and nerve trauma between urban civilian ballistic injuries (Chicago) and military/terrorist ballistic injuries (Europe, Africa).
5) Address differences in epidemiology and outcomes in children vs. adults.