INTERDEPENDENT MEDICAL SPECIALISTS AND OPTIMAL UPPER LIMB TRAUMATIC AMPUTATION PROSTHETIC OUTCOMES

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INTRODUCTION
The importance of collaboration among skilled healthcare professionals managing upper limb (UL) prosthetic rehabilitation is well documented. (Esquinazi, 2004; Baumgartner, 2001) The need for swift and seamless team collaboration is especially significant when managing traumatic upper limb amputation.

The 2005 American College of Surgeons Committee on Trauma report provides direction for evaluation and treatment of complex UL extremity trauma. “While the treatment goal remains extremity salvage, these injuries carry a high potential for morbidity and amputation”. (AmCollSurgeons, 2005) The report summarizes recommended treatment algorithms for the multi system involvement associated with these unique injuries.

Co-morbidities associated with multisystem trauma often negatively impact the timeline to optimal UL prosthetic outcome. An example of this patient population subset is those with high voltage electrical burns. “High-voltage injuries in particular have far reaching social and economic impact largely because of the patient population at greatest risk, that is, younger men at the height of their earning potential.” (Arnoldo, 2004) They are representative of the complex nature of traumatic upper limb amputation patient presentations and the far reaching impact of their injuries throughout recovery and beyond.

The traumatic UL amputation patient population demands congruent communication among interdependent medical specialists. Awareness of peers’ contribution to optimal outcomes along with methods of communication among them is examined.

METHOD
A literature review of traumatic amputation prosthetic rehabilitation medical team members’ impact on patient outcomes was performed. Additionally, medical specialists completed a questionnaire to determine: 1) individual perceptions of patient presentation 2) ease of access to medical specialty team members 3) preferred methods of accessing specialty services 4) awareness of experts in UL prosthetics.

RESULTS
Review of literature indicates an emphasis on the need for medical team collaboration but, little information as to best practice for creating seamless communication among specialists. Specialists in environments with peer resources within their medical system report ease of access to peers. Specialists independent of a large medical system find their environment requires reliance on relationships with specialists and personal contact for peer access. The need for defined understanding of criteria to identify prosthetic rehabilitation specialists as experts in traumatic UL amputation was also expressed.

DISCUSSION
While literature supports the importance of traumatic amputation team collaboration there is minimal discussion of the communication process from initial treatment to patients’ successful use of prostheses for productive living. There is also limited information as to what defines a prosthetic rehabilitation team member as a specialist in traumatic upper limb care.

CONCLUSION
“Despite the limits set by nature, there still is so much one can improve in surgery and in prosthetics as well.” (Baumgartner, 2001) Improvements can come in the simplest of forms; awareness of the strengths of specialty team members and improved methodologies for tapping into their skills to optimize patient outcomes.

CLINICAL APPLICATIONS
UL traumatic patient outcomes will benefit as a result of the expert collaboration by means of a matrix of comprehensive traumatic UL team members and methods of communication in their treatment settings.

REFERENCES
American College of Surgeons, Committee on Trauma Ad Hoc Committee on Outcomes, 2005.

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