

February 2021

Evaluation of Intestinal Transplantation for Short Bowel Syndrome due to Gun Violence versus Other Causes: A Single Center Experience

Leya Maliekal
ft8587@wayne.edu

Nemie Beltran
Henry Ford Health System, NBELTRA1@hfhs.org

Shunji Nagai
Henry Ford Health System, snagai1@hfhs.org

Syed-Mohammed Jafri
Henry Ford Health System, sjafri3@hfhs.org

Follow this and additional works at: https://digitalcommons.wayne.edu/som_srs

 Part of the [Medicine and Health Sciences Commons](#)

Recommended Citation

Maliekal, Leya; Beltran, Nemie; Nagai, Shunji; and Jafri, Syed-Mohammed, "Evaluation of Intestinal Transplantation for Short Bowel Syndrome due to Gun Violence versus Other Causes: A Single Center Experience" (2021). *Medical Student Research Symposium*. 124.
https://digitalcommons.wayne.edu/som_srs/124

This Research Abstract is brought to you for free and open access by the School of Medicine at DigitalCommons@WayneState. It has been accepted for inclusion in Medical Student Research Symposium by an authorized administrator of DigitalCommons@WayneState.

Title: Evaluation of Intestinal Transplantation for Short Bowel Syndrome due to Gun Violence versus Other Causes: A Single Center Experience

Introduction:

Short Bowel Syndrome (SBS) due to trauma is a rarely examined problem with a unique solution in Intestine Transplantation. We discuss factors that may have contributed to variations in patient outcome after intestinal transplant surgery secondary to SBS due to gun violence.

Methods: A retrospective chart review was conducted for intestinal transplant patients at an urban medical center. Two patients underwent intestinal transplants secondary to SBS after small bowel resections for gunshot related injury (GSW). Trends were noted and compared to trends found among patients comprising the intestinal transplant recipient registry (n=26) at the same medical center.

Results: Two patients were transplanted for intestinal failure related to gunshot wound. 24 patients in the non-GSW group were transplanted for other indications including Crohn's disease (n=6), neuroendocrine tumor (n=5), and anatomic infarction (n=6). The average age for intestine transplant due to GSW was 29.5 years, compared to 47.8 years of non-GSW group. 50% of patients with GSW had rejection within 6 months following intestine transplant versus 36% from the non-GSW group. 50% of the GSW patients were alive one year and 5 years post-transplant. 92% and 71% of the non-GSW patients were alive at one year and 5 years post-transplant respectively.

Conclusion: Intestine transplant can be successful in short bowel syndrome due to gunshot wound. Patients should be considered based on co-morbid conditions and risk factors rather than cause of trauma. Further large, multi-center studies are needed to elucidate risk factors related to the success of intestinal transplant for short bowel syndrome due to trauma.