SPOTLIGHT ON CLINICAL RESEARCH

Handoffs in Critical Care, Imaging for Blunt Injuries, Trauma Surgery

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Editor's note: This is the 12th in a series of articles from the Penn Medicine Lancaster General Health Research Institute that describes ongoing research studies. Other active studies have been described in previous issues of this journal.

The Lancaster General Health Research Institute welcomes guest authors Dr. Lindsey Perea and Dr. Eric Bradburn for this special spotlight on trauma research. The authors overview top studies below; several additional active studies are listed on the next page. Physicians who wish to refer patients for any of the studies mentioned are encouraged to contact the Research Institute at 717-544-1777.

Other members of the Lancaster General Health staff who are conducting research and wish to have their studies described here are encouraged to contact the offices of JLGH at 717.544-8004.

SPONSORED STUDY

Handoffs and Transitions in Critical Care: Understanding Scalability

Sponsor: National Institutes of Health R01 Lead Project Investigator: Meghan Lane-Fall, MD Site (LGH) Co-Investigator: Lindsey Perea, DO

This is a prospective, observational multicenter study among 12 ICUs across the country. Penn Medicine in Philadelphia is the lead site. This five-year study funded by the National Institutes of Health (NIH) takes a hybrid approach, looking at effectiveness and implementation. The study participants are the providers.

The goal of the study is to standardize and streamline handoff communication from operating room (OR) to intensive care unit (ICU) using protocols tailored to meet the needs of each site. Standardizing handoffs should achieve decreased provider workload, fewer information errors, more efficient communication, avoidance of preventable harm, and improved provider satisfaction.

The study first aims to determine what influences

implementation of an OR-to-ICU handoff protocol through interviews, focus groups, and surveys. The next aim of the study is to create a standardized OR-to-ICU handoff protocol tailored to each intensive care unit. Each ICU in the study will subsequently implement the handoff protocol in a staggered fashion. Finally, a handoff protocol kit will be designed for wide dissemination.

This study is being performed in the Trauma Neuro Unit at Lancaster General Hospital. Participation began a year ago, and implementation in the unit is expected in early Winter 2023.

INVESTIGATOR-INITIATED STUDY

REDSOC: Radiographic Evaluation of Delayed Solid Organ Complications

Sponsor (Unfunded): Eastern Association for the Surgery of Trauma (EAST)

Principal Investigator: Lindsey Perea, DO

This prospective, observational multicenter study is looking at blunt injuries to the spleen and liver. Currently, no clear guidelines exist regarding the necessity of repeat imaging or frequency of intervention in these injuries. After performing a dual institution pilot study that was underpowered, the investigators sought to answer these questions on a large scale.

The study aims to define which blunt hepatic and splenic injuries are at risk of delayed complications, which patients warrant repeat imaging, and when the imaging should be performed. Additionally, this study seeks to identify the incidence of interventions performed for delayed complications found on imaging.

To date, over 30 sites worldwide are enrolling patients, with more than 1,000 patients entered into the study database. The overall enrollment goal is 5,000-plus patients of all ages; LG Health has enrolled more than 100 of these patients.

Additional Active Studies in the Division of Trauma and Acute Care Surgery

Dr. Lindsey Perea is the principal investigator on all studies, unless otherwise noted.

INVESTIGATOR-INITIATED STUDIES

Delirium in the Elderly: Factors in Trauma

Social Determinants of Health in Trauma Patients — with Eric Bradburn, DO

COVID-19 and Alcohol in the Setting of Trauma — with Eric Bradburn, DO

Comparison of Immediate vs. Delayed Operative Outcomes in Patients with Symptomatic Cholelithiasis

Application of Bundled Procedure in the Critically III Trauma Patient

An Analysis of Patient Follow-up after Implementation of an Incidental Findings Protocol

MULTICENTER STUDIES

Effects of Age, Anticoagulants, and Antiplatelet Agents on Motorcycle-Related Injuries in Pennsylvania

CLOTT 3 — Principal Investigator: Eric Bradburn, DO

Prospective Study of Mean Arterial Blood Pressure Augmentation in the Treatment of Spinal Cord Injuries*

Outcomes Among Trauma Patients with Duodenal Leak Following Primary vs. Complex Repair of Duodenal Injuries*

Early vs. Delayed Fasciotomy Following Extremity Trauma**

Outcomes of Early Initiation of Venous Thromboembolism Prophylaxis in Isolated Traumatic Brain Injuries*

A Comprehensive and Collaborative Review of the Use of Whole Blood at Trauma Centers in the United States*

NOTES

- * Eastern Association for the Surgery of Trauma (EAST) Sponsored
- ** American Association for the Surgery of Trauma (AAST) Sponsored

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A complete list of active clinical studies at Lancaster General Health is available online. To access the most current list, scan the QR code at right, or find the link on the JLGH.org Resources/Links page.

