A PROSPECTIVE MULTICENTER TRIAL OF THE MANAGEMENT OF STABLE PATIENTS WITH ANTERIOR ABDOMINAL STAB WOUNDS
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Selective management of patients with anterior abdominal stab wounds (AASWs) (defined as extending from the xiphoid to the pubis and between the right and left mid-axillary lines) has been practiced for decades, but the optimal strategy is still debated. There is little debate regarding the need for laparotomy (LAP) in those with shock, peritonitis, or evisceration. But the remainder of patients are low-risk, and continue to be the subject of controversy.

Local wound exploration (LWE) has been promoted to evaluate the extent of the wound. Those without fascial penetration could be discharged from the emergency department (ED), and the remainder would undergo diagnostic peritoneal lavage (DPL). CT scanning may be a reliable noninvasive alternative to LWE in this scheme. This approach has limitations. In performing LWE, following a wound tract through the layers of the abdominal wall can be challenging, particularly in obese or very muscular patients. Likewise, CT scanning may be difficult to interpret. Moreover, DPL has associated risks, and its results may be misleading.

An alternative strategy for the management of stable patients with AASWs is to perform serial clinical assessments to look for evidence of ongoing bleeding or hollow viscus injury. This approach avoids invasive testing and diagnostic confusion. On the other hand, it relies on subjective findings, may lead to delays in diagnosis, and precludes the option of discharge from the ED. Neither approach has been proven superior in terms of patient outcomes or cost-effectiveness. Thus, **the purpose of this study** is to determine whether LWE/Imaging/DPL is superior to serial clinical assessments in the management of patients with AASWs, in terms of timely diagnosis and cost-effectiveness.

Study Design: Data will be collected on patients with AASWs. Patients will be followed and outcome measures tracked, and subgroups will be analyzed according to their management strategy. **Note: The management of the patient will be left up to the discretion of the attending surgeon and will not be directed by this study.**

Inclusion Criteria: Adult patients with isolated AASWs defined anatomically as above.

Exclusion Criteria: Pregnancy; Incarceration. Suspicion for thoracoabdominal wounds.

Outcome Measures: Mortality; Morbidity related to delays in diagnosis/delays to LAP; Morbidity related to procedures (LWE, DPL); Number discharged from ED; Number of nontherapeutic LAPs; Total costs per patient with each strategy (Equipment/supplies for LWE/DPL, CT scans, hospital admissions, LAPs)

Management of Anterior Abdominal Stab Wounds Data Sheet

Inclusion Criteria: ≥16 years old; Isolated anterior abdominal stab wound

Exclusion Criteria: Pregnancy; Incarceration, Suspicion for thoracoabdominal wound

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Data

Patient Identifier _____

Institution/Surgeon _____

Gender _____ Age _____ Date of Injury _____

No. of Wounds (Circle): 1 2 3 >3

Wounding Agent _____

Immediate Operation? Y (Circle Reason) N

Shock: HR _____ Systolic BP _____

Evisceration: Omentum Intestine Other _____

Peritonitis: Localized Diffuse

Other_____

CT ? Y N With oral contrast? Y N

Findings _____

FAST exam? Y N Findings_____

Local Wound Exploration? Y N

Findings (eg, Depth of penetration) _____

Diagnostic Peritoneal Lavage? Y N Grossly Positive(blood ? enteric?) Y N

Results: RBC _____ WBC _____ Amy _____ Alk Phos _____ Bili _____

Discharge from ED? Y N Follow-up? (Time postinjury) _____

Admit for Observation? Y N

Laparoscopy? Y N

Delayed Operation? Y (Circle Reason) N How long after admission? _____

Shock: HR _____ BP _____

Peritonitis: Localized Diffuse

Evisceration: Omentum Intestine Other _____

↓Hemoglobin _____ to _____ ↑WBC _____ to _____

Repeat FAST? _____

Other_____

Injuries _____

Classify Laparotomy:	Negative	Nontherapeutic
	Therapeutic/Nonessential	Therapeutic/Essential

Complications _____

Hospital Length of Stay _____

ICU Length of Stay _____

Institutional Data Sheet (Submit only once)

Institution _____

Please describe your institutional (or personal) management algorithm (eg, Mandatory laparotomy/laparoscopy; Local wound exploration (LWE)/DPL; Routine CT scanning; Serial clinical assessments)

_____
_____
_____
_____

Charge for LWE _____
Charge for CT scan _____
Charge for US _____
Charge for DPL _____
Charge for Laparoscopy _____
Charge for ED Observation _____
Charge for 23 hour observation _____
Charge for CBC _____