UAMS MEDICAL CENTER
TRAUMA and CRITICAL CARE SERVICES MANUAL

SUBJECT: Utilization of Temporary Abdominal Closure in Acute Care Surgery

SUPERSEDES: New **PAGE:** 1 of 1

RECOMMENDATION(S): Dr. Benjamin Davis **APPROVAL: 3/15/2018**

CONCURRENCE(S): All **EFFECTIVE: 3/26/2018**
Reviewed: 2/21/2019

PURPOSE:

To describe the generally accepted indications for use of Temporary Abdominal Closure (TAC) in Acute Care Surgery at the University of Arkansas for Medical Sciences.

BACKGROUND:

Temporary abdominal closure (TAC) in conjunction with damage control laparotomy saves lives [1, 2] but is not without serious complications. [3,4] Some centers have shown high rates of TAC [3,4] and successfully reduced those rates without increasing morbidity and mortality in trauma patients through quality improvement efforts [5]. UAMS may have variability of practice patterns within the acute care surgery division, and our patients may benefit from a standardized approach to TAC.

POLICY: A sign will be posted in ORs 6, 7 and 13 with the following summary;

GENERALLY ACCEPTED indications for trauma laparotomy are as follows;
1. Therapeutic packing for hemorrhage control
2. *CONTINUOUS/ONGOING* vasopressor or blood transfusion requirement
3. Expediting transfer to interventional radiology for THERAPEUTIC intervention (hemorrhage control)
4. Treatment of or prophylaxis against abdominal compartment syndrome

QUESTIONABLE INDICATIONS
1. Need for “second look” as only indication for open abdomen (exception; ischemic bowel as primary indication for operation)
2. Expediting diagnostic imaging or ICU transfer
3. Acidosis WITHOUT ongoing vasopressor/transfusion requirement
4. Gross contamination

NON-PATIENT FACTORS – if attending surgeon is considering leaving abdomen open because of multiple patients requiring attending surgeon attention or other external factors, STRONGLY CONSIDER CALLING BACK-UP SURGEON to assist in the closure of the current abdomen or management of those other issues.

On patient’s receiving a temporary abdominal closure, use the smartphrase .ACSTAC to document indications and data used for decision making for review at morning report.

Physician-specific data on TAC rates will be assessed quarterly.

REFERENCES

1. Stone HH, Strom PR, Mullins RJ, Management of the Major Coagulopathy with Onset during Laparotomy. *Ann Surg.* 1983 May;197(5):532-5.
2. Rotondo MF *et al* ‘Damage Control’: An Approach for Improved Survival in Exsanguinating Penetrating Abdominal Injury. *J trauma 1*993 Sep;35(3):375-82; discussion 382-3.
3. Montalvo JA, *et al*. Surgical Complications and Causes of Death in Trauma Patients That Require Temporary Abdominal Closure. *The American Surgeon*. Mar 2005; 71, 3 pg 219
4. Hatch, *et al.* Current Use of Damage-Control Laparotomy, Closure Rates, and Predictors of Early Fascial Closure at First Take-Back. *J Trauma.* Jun 2011
5. Harvin *et al.* Decreasing the Use of Damage Control Laparotomy in Trauma: A Quality Improvement Project. *J Am Coll Surg* Aug 2017 pg 200-209