

Evaluation of a patient with Blunt Abdominal Trauma

LAST UPDATED: 2nd SEPTEMBER, 2010

Parameters of the Guideline:

- All patients with abdominal trauma or suspected abdominal trauma

Definitions of Terms:

DPL – Diagnostic Peritoneal Lavage

CT – Computed Tomography

FAST – Focused Abdominal Sonography for Trauma

BAT – Blunt Abdominal Trauma

Responder - where vital signs return to normal; associated with minimal blood loss (<750ml); low need for crystalloid or blood substitute; surgical presence mandatory and possible operative intervention

Non-Responder – where the vital signs continue to be abnormal; blood loss estimate is severe >2000ml; high need for aggressive fluid (crystalloid) and blood product usage and high or imperative need for operative intervention

Transient Responder – where there is transient improvement in vital signs but recurrence of hypotension and tachycardia; there is moderate or ongoing bleeding (750-1500ml); high need for crystalloid and blood product usage; highly likelihood of operative intervention and constant presence of surgical unit

Background:

Evaluation of patients who have sustained BAT may pose a significant diagnostic challenge to the most doctors. Blunt trauma produces a spectrum of injury from minor, single-system injury to devastating, multi-system trauma. Attending doctors must have the ability to detect the presence of intra-abdominal injuries across this entire spectrum. While a carefully performed physical examination remains the most important method to determine the need for exploratory laparotomy, there is little Level I evidence to support this tenet.

The effect of altered level of consciousness as a result of neurological injury, alcohol or drugs, is another major confounding factor in assessing BAT.

Due to the recognized inadequacies of physical examination, trauma surgeons have come to rely on a number of diagnostic adjuncts. Commonly used modalities include diagnostic peritoneal lavage (DPL) and computed tomography (CT). Although not available universally, focused abdominal sonography for trauma (FAST) has recently been included in the diagnostic armamentarium.

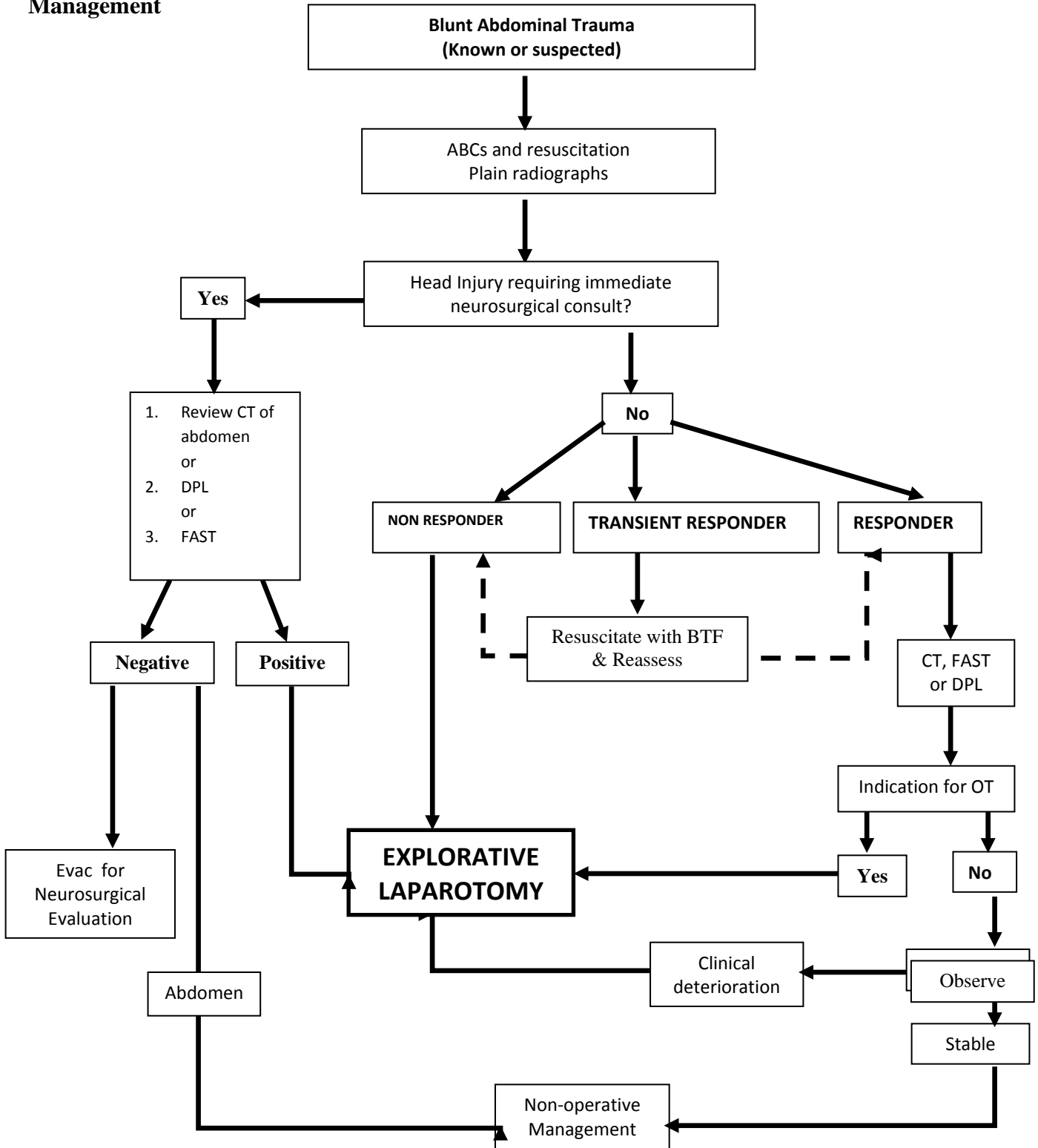
Rationale for Guideline:

Medical Officers at the sub-divisional level will at one time or the other be faced with a patient presenting with either BAT or suspected abdominal trauma. Patients may present during convenient daylight hours or during the odd hours of the evening. During these occasions you may also be the only Medical Officer in attendance.

This guideline and algorithm is set out to help you plan your approach to these patients systematically.



Management



References

- **Practice Management Guidelines For The Evaluation Of Blunt Abdominal Trauma**, EAST Practice Management Guidelines Work Group, Hoff et al
- Joint Theater Trauma System Clinical Practice Guideline, 7th November 2008, Blunt Abdominal Trauma
- Rodriguez A, DuPriest RW Jr., Shatney CH: Recognition of intra-abdominal injury in blunt trauma victims. A prospective study comparing physical examination with peritoneal lavage. *Am Surg* 48: 457-459, 1982.
- Schurink GW, Bode PJ, van Luijt PA, et al: The value of physical examination in the diagnosis of patients with blunt abdominal trauma: a retrospective study. *Injury* 28: 261-265, 1997.

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| Scope and Application | This CPG is intended for use by all health care workers in their daily care of patients who undergo this particular surgical procedure |
| Effective Date | 2010 |
| Supersedes Policy Number | Not applicable |
| Review Responsibilities | The Chairperson of the Surgical CSN will initiate the review of this guidelines every 3 years from the date of issue or as required. |
| Further Information | Surgical CSN Chairperson |

RESPONSIBILITY:

CPG Owner: National Surgical CSN

CPG Writer: Ministry of Health

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