Maine Medical Center Trauma Clinical Practice Guideline (MMCT-CPG)

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Blunt Hepatic Injury (MMC-CPG ID: 2019-04)

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Guidelines translate best evidence into best practice. A well-crafted guideline promotes quality by reducing healthcare variations, improving diagnostic accuracy, promoting effective therapy, and discouraging ineffective – or potentially harmful – interventions.

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PURPOSE

These guidelines are note intended to supplement physician/APP judgement. Rather, these guidelines are intended to provide a basic framework for the assessment and management of blunt hepatic injuries.

BACKGROUND

Over the past 150 years the management of blunt hepatic injuries has come full circle from conservative medical management, to mostly operative intervention, to selective non-operative management. Determining which patients would do well with conservative medical management is key. The Eastern Association for the Surgery of Trauma reviewed the literature extensively and developed guidelines for non-operative management of blunt hepatic injury. We will discuss these findings here and have incorporated into an easy algorithm (Appendix 1)

INITIAL MANAGEMENT

Level I Recommendation:

- Patients with hemodynamic instability and diffuse peritonitis should be taken to the OR urgently for laparotomy.

Level II Recommendation:

- Patients who are hemodynamically stable with no peritonitis should have a CT with IV contrast to assess the severity of injury to the liver
  **Consider angioembolization for patient who are transient responders to resuscitation or who have active extravasation on CT

SUBSEQUENT MANAGEMENT

Level III Recommendation:

- After hepatic injury perform repeat CT in patients with SIRS response, decreased hemoglobin, increased abdominal pain or jaundice.
- In patients with complications (bile leak, abscess, hemobilia) consider ERCP, angiography, laparoscopy, and percutaneous drainage.
- DVT prophylaxis will not increase failure rates of non-operative management, however the optimal time to initiate it is uncertain.

PERFORMANCE IMPROVEMENT MONITORING

Intent / Expected Outcomes:

- All patients with blunt hepatic injuries will be placed on the blunt hepatic injury algorithm as below to assist with standardization of care. Departures from the algorithm will be reviewed.

Performance / Adherence Measures:

- Will assess adherence at morning report and PIPS and continually re-visit whether this CPG should be monitored.
- Deviations from protocol will be discussed in accordance with the PIPs Process.

Data Source:

- Morning report and patient record

SYSTEM REPORTING & FREQUENCY

The above constitutes the minimum criteria for PI monitoring of the MMCT-CPG. System reporting will be performed annually; additional PI monitoring and system reporting may be performed as needed.

The system review and data analysis will be performed by the MMC Trauma Service under the direction and responsibility of the MMC Trauma Medical Directory and MMC Trauma Medical Program Manager.

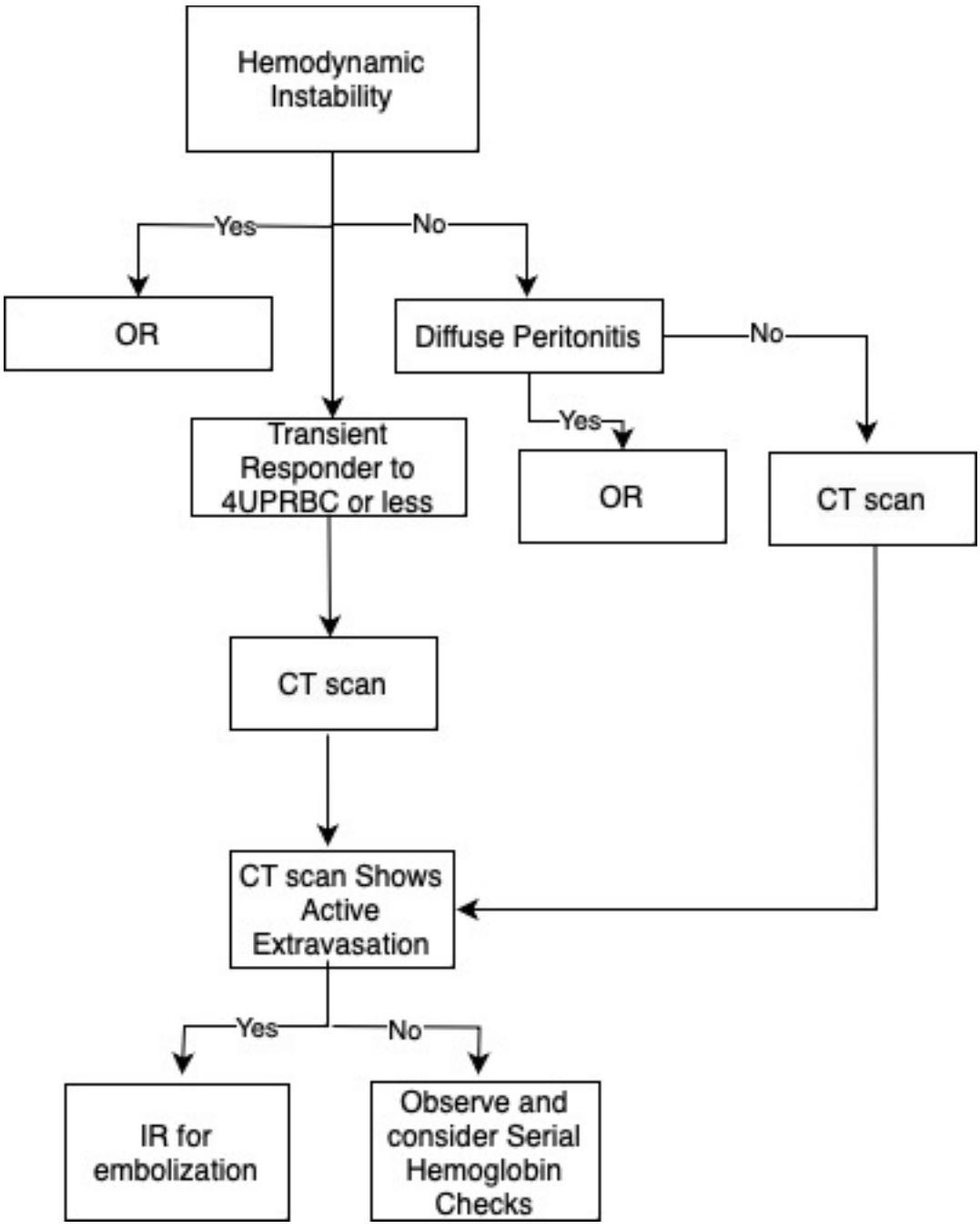
RESPONSIBILITIES

It is the Trauma Medical Director's responsibility to ensure familiarity, appropriate compliance, and PI monitoring with this MMCT-CPG.

REFERENCES

Stassen, N et al. Nonoperative management of blunt hepatic injury: An Eastern Association for the Surgery of Trauma practice management guideline. (2012) Journal Trauma Acute Care Surg. 73(5): Suppl 4:S288-293.

APPENDIX 1 - Management Algorithm



***Consider repeat CTA prior to discharge in patients with Grades 4 and 5 liver laceration

APPENDIX 2 – Complications of Hepatic Laceration