



2020 Annual Meeting

August 2 - 4, 2020 | Mackinac Island, MI
Grand Hotel

P 24. INDICATIONS FOR DIAGNOSTIC PERITONEAL LAVAGE IN THE MODERN ERA OF TRAUMA: A CASE SERIES

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Background: Since its description in 1965, diagnostic peritoneal lavage (DPL) was a mainstay of management for blunt and penetrating trauma. Over the past twenty years, the use of DPL has become less common due to advances in CT imaging and FAST exam. However, ATLS continues to include DPL in treatment algorithms for blunt/penetrating abdominal trauma. This study aims to identify indications for DPL in the modern era of trauma.

Methods: This is a single institution, retrospective study of trauma patients at a Level 1 trauma center who underwent a DPL and had a FAST exam between 2004 and 2019. The institutional EMR and paper charts were utilized to collect demographic and outcomes data.

Results: Eleven patients were identified. Average age was 47 years (Range 4-83) and 82% of the patients were male. Nine (82%) of patients that underwent DPL had a GCS of 3 and the average ISS was 42 (Range 14-57). Index admission mortality was 45% (5/11).

For ten (91%) of the patients, hemodynamic instability was an indication. This was in conjunction with other indications including abdominal distension, blunt abdominal trauma, and high impact mechanism. In 7 (64%) cases, the FAST exam was equivocal. The rest were negative.

Four (37%) DPLs were positive for frank blood. None of these patients underwent CT scan. Three had major injuries requiring surgical intervention and one died in the trauma bay. One was positive based on microscopic criteria and did not require surgery.

Of the six negative DPLs, four had CT scans. Three had solid organ injuries requiring surgical intervention, three had no significant injuries.

Conclusion: While DPLs were rarely performed at our institution over the last 20 years, patients with high ISS, low GCS, and equivocal FAST were more likely to have the procedure. All patients with positive DPLs were found to have significant injuries on surgical exploration. In the setting of hemodynamic instability (contraindication to CT imaging) or an equivocal FAST, DPL may be beneficial.