

PERITONEAL LAVAGE & DIALYSIS FOR PATIENTS WITH SEVERE ACUTE PANCREATITIS: A SYSTEMATIC REVIEW

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BACKGROUND



Severe acute pancreatitis (SAP) is common and lethal with a 15-20% mortality



Toxic exudates in ascitic fluid present a treatment target

Peritoneal lavage and dialysis (PLD) could improve patient outcomes by reducing the inflammatory burden

AIMS

- 1 To determine the **current use and outcomes** of PLD for patients with SAP
- 2 To explore its **safety**

METHODOLOGY

Systematic review with narrative synthesis using a MEDLINE, Embase, PsycInfo and Cochrane Library search in July 2023.

Inclusion criteria:

- ✓ Adult patients with SAP according to Atlanta 2012
- ✓ PLD or Laparoscopic Lavage (LL) as treatment modalities
- ✓ All studies excluding case reports

Records screened (n=210)



Studies included (n=6)

Records excluded (n = 214)

- Not PLD or LL
- Not SAP

RESULTS



3 Randomised controlled trials (RCTs)
 3 Retrospective Cohort studies (Non-randomised / NRS)
 499 patients



All studies varied with catheter insertion and dialysis protocols

All studies deemed at moderate or high risk of bias

IMPROVED OUTCOMES

Length of stay	5-day reduction with PLD (P<0.01), Jiang et al., NRS) 30-day reduction with LL (P<0.05), Wang et al., RCT)
Pancreatic encephalopathy	0 in PLD compared to 12% in percutaneous drainage (PCD) (P=0.02, He et al., RCT)
Further drainage	20% in PLD compared to 46% in PCD (P=0.008, He et al., RCT)
Mortality	9% reduction with LL (P<0.05, Wang et al., RCT)
Other complications	0 VTEs in PLD compared to 10% in (PCD) (P=0.03, He et al., RCT) All complication 24% reduction in LL (P<0.05, Wang et al., RCT)

SAFETY



1 report of bleeding at PLD site (Li et al., NRS)

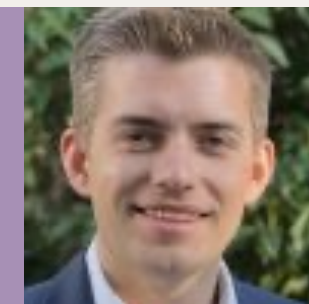
No other safety concerns reported

CONCLUSION

PLD demonstrates **potential as a therapy to improve outcomes** for patients with SAP. The current evidence involves studies with **heterogenous interventions** and at **substantial risk of bias**. Further research is required, particularly through **high-quality randomised clinical trials**, to convey the feasibility and true efficacy of PLD as an early therapy in SAP.

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