

# Diagnostic peritoneal lavage

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Diagnostic peritoneal lavage (DPL) is a test rarely used in modern-day practice but can be of value in resource-limited settings. It is a test used to assess the presence of blood or contaminants in the abdomen. A nasogastric tube is placed to empty the stomach and a urinary catheter is inserted to drain the bladder. A cannula is inserted below the umbilicus, directed caudally and posteriorly. The cannula is aspirated for blood ( $>10$  mL is deemed as positive) and, following this, 500 mL of warmed Ringer's lactate solution is allowed to run into the abdomen from a 1-litre bag. The bag, with 500 mL remaining, is placed on the floor and the intra-abdominal fluid is allowed to flow under the influence of gravity - this aids drainage. The presence of frank blood or similar contents to a nasogastric tube or urinary catheter denotes a positive DPL. If time allows and laboratory diagnosis is available, the presence of  $>100$  000 red cells/ $\mu$ L or  $>500$  white cells/ $\mu$ L is deemed positive (this is equivalent to 20 mL of free blood in the abdominal cavity), as is a raised amylase level. In the absence of laboratory facilities, a urine dipstick may be useful. Drainage of lavage fluid via a chest drain indicates penetration of the diaphragm. Although DPL has largely been replaced by eFAST (see Focused abdominal sonography for trauma and extended FAST (FAST and eFAST)), it remains the standard in many institutions where eFAST is not available or is unreliable. Diagnostic peritoneal lavage

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Revision #1

Created 2025-12-31 15:12:31 UTC by Omar Ayman

Updated 2025-12-31 15:12:31 UTC by Omar Ayman