

Q1 WHAT IS THE BEST COURSE OF ACTION?

- A. Seek surgical evaluation for hernia removal
- B. Transition to HD to reduce intra-abdominal pressure, and re-evaluate hernia
- C. Decrease dwell volumes to reduce intra-abdominal pressure, and re-evaluate hernia
- D. Hernia surgery is contraindicated when patients are on PD

The correct answer is A.

Abdominal wall hernias are common in PD, affecting up to 12% - 37% patients. They can cause discomfort, pain, and also retain dialysate, thus increasing the risk of predictable clearance and ultrafiltration. Studies have identified a low body mass index with muscle wasting and polycystic kidney disease as risk factors for hernia development. Although increased intra-abdominal pressure has not been shown to be a consistent risk factor for hernia incidence, it may cause progressive enlargement of the hernial sac. For all those reasons, early surgical repair is advocated. In this patient's case, it is best to repair the hernia. In the interim it is recommended to proceed with lower dwell volumes to reduce intrabdominal pressure, however, this should not preclude surgical intervention.

A 10-year retrospective case-controlled study compared patient survival, PD technique survival, and residual renal function in patients with a history of abdominal hernias. Overall, 49 of 73 (67%) hernias were treated surgically. In 53% of subjects, early postoperative dialysis was not needed; only 7 patients required temporary hemodialysis. The occurrence of a hernia and its treatment did not significantly affect residual renal function. After a hernia diagnosis or repair, 86% of patients were able to continue with PD.

Further reading:

<https://pubmed.ncbi.nlm.nih.gov/17047236/>

https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3862092/pdf/pdi_33_6_009.pdf

<https://bmcsurg.biomedcentral.com/articles/10.1186/s12893-020-00979-2>