

Q3 WHAT IS THE NEXT BEST STEP?

- A. Replace transfer set
- B. Replace PD catheter
- C. Repair hole
- D. Obtain PD cell count and culture and prescribe an empiric dose of antibiotics
- E. A and D

The correct answer is E.

This is a case of a wet contamination. Generally there are two types of contaminations that occur while on PD:

1. Dry contamination: Contamination outside a closed PD system, such as disconnection distal to a closed clamp. Examples include exposed end of clamped transfer set is dropped, touched by non sterile surface such as hands, clothing, bed sheets, table etc, disconnection of the minicap. There has been no fluid flowing into or out of the transfer set during this break.

Treatment of a dry contamination usually involves immediately stopping the active procedure and placing a new mini cap prior to resuming. Antibiotics are not needed for a dry contamination

2. Wet contamination: Contamination with an open system, when either dialysis fluid is infused after contamination or if the catheter administration set has been left open for an extended period. Examples include leaks from dialysate bags, leaks or breaks in tubing proximal to the tubing clamp, breach of aseptic technique or touch contamination of the connection during a PD exchange. Prophylactic antibiotics is only recommended after wet contamination. If it is unclear whether the tubing clamp was closed or open during contamination, wet contamination should be considered.

There is evidence to support that prophylactic antibiotics reduce the risk of peritonitis during wet continuation. Most common organisms are coagulase negative staph. For this reason, it is recommended to obtain a cell count and culture and prescribe a prophylactic dose of abx (commonly administered as 1 dose of IP cefazolin to cover gram + organisms).

In this case, because the hole is limited to the transfer set, the entire PD catheter does not need to be replaced. However, if the hole was proximal to the transfer set adapter, then either the hole should be repaired or the PD catheter should be replaced.

Additional Reading:

<https://journals.sagepub.com/doi/epub/10.1177/08968608221080586>

https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3524909/pdf/pdi_32_6_008.pdf