## Q4 ALL OF THE FOLLOWING ARE STRATEGIES FOR MANAGEMENT, EXCEPT?

- A. Intraperitoneal heparin
- B. Peritoneal lavage
- C. Colder (room temperature) dialysate
- D. Empiric treatment with IP antibiotics

The correct answer is D.

This patient has hemoperitoneum. The likelihood of peritonitis is low due to the lack of abdominal pain and only 30 nucleated cells in the peritoneal fluid count. Hemoperitoneum is infrequent but usually benign. The differential diagnosis is broad and be divided into three etiologies:

- 1. Gynecological etiologies: retrograde menstruation, endometriosis, ovulation, ovarian cysts, ectopic pregnancy
- 2. Acute abdominal syndromes: trauma, peritonitis acute pancreatitis acute cholecystitis splenic rupture
- 3. Peritoneal membrane pathology: sclerosing peritonitis, peritoneal carcinomatosis, radiation fibrosis

The most crucial part of diagnosis and management is to rule out any life-threatening or emergent process. Once this has been ruled out, or a benign process is identified, there are several strategies to mitigate the hemoperitoneum:

- 1. Intraperitoneal heparin can help with reducing blood clots. Although this strategy may initially seem contradictory, hemoperitoneum creates a higher risk of blood clots and may cause catheter dysfunction. Instilling low dose heparin 500-1000 units per liter can mitigate this.
- 2. Peritoneal lavage will help fluid stay mobile and reduce the risk of clot formation.
- Cooler dialysate (room temperature), although potentially uncomfortable, can cause vasoconstriction of the peritoneal vasculature which may reduce bleeding.

## Further reading:

https://www.ajkd.org/article/S0272-6386(01)35885-7/fulltext

https://pubmed.ncbi.nlm.nih.gov/3619223/

https://pubmed.ncbi.nlm.nih.gov/17468466/