

Q5. WHICH OF THE FOLLOWING DIAGNOSES SHOULD YOU HAVE A HIGH INDEX OF SUSPICION FOR?

- A. Uremia
- B. Encapsulating peritoneal sclerosis
- C. Depression
- D. Gastroparesis

The correct answer is B.

Encapsulating peritoneal sclerosis (EPS) requires a high index of suspicion due to its non-specific symptoms which are shared by many other conditions. It is one of the most serious complications of PD and has a very poor prognosis. Risk increased with total years of PD. Can occur after PD has been stopped. Diagnosis is confirmed by radiographic imaging showing thickening of the peritoneal membrane extending from the visceral to parietal surfaces, encasement of small bowel which limits normal motility (abdominal “cocooning”). The thickened fibrotic membrane creates cystic fluid collections (technically ascites). There is varying prevalence from 0.5% to 7.3% depending on years on PD. It can occur after cessation of PD and known to occur after kidney transplant because CNIs are profibrotic and theoretically increase risk. The ultimate etiology is unclear, but it’s important to know peritoneal dialysate is inherently bioincompatible due to its low pH, glucose exposure, glucose degradation products and advanced glycation end-products.

There are no stated guidelines or proven step-wise management of EPS due to its poor prognosis. Management options include:

- Cessation of PD
- Often will need additional nutrition support (TPN in a worst-case scenario)
- Intermittent peritoneal lavage (transition to HD, keep the PD catheter, and weekly lavage to wash the inflammatory fibrous material)
- Ant inflammatory and antifibrotic agents
- Glucocorticoids, mycophenolate, tamoxifen, and colchicine. Tamoxifen is a known antifibrotic agent which has been used to treat retroperitoneal fibrosis, fibrosing mediastinitis, idiopathic sclerosing cervicitis, and desmoid tumors. First described in treating EPS in 1992, dosed at 10 to 40 mg daily
- Surgical peeling of fibrous material and bowel realignment.

Recurrence of encapsulating is noted in over 20% of cases.

Further reading:

<https://pubs.rsna.org/doi/full/10.1148/rg.2019180108>

<https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4283512/>

<https://www.nature.com/articles/nrneph.2011.93>

<https://www.karger.com/Article/Fulltext/191214>