Postoperative chylous ascites

Introduction

- **Definition**: intraperitoneal accumulation of triglyceride-rich fluid from the intestinal lymph caused by a blockage or rupture of the lymph nodes in the peritoneum or retroperitoneum.
- **Consequences**: nutritional, mechanical, and immunological problems due to the constant loss of lymphocytes and proteins. May lead to intraperitoneal neoplasia.
- **The urological interventions involved are** radical nephrectomy, adrenalectomy, and, more frequently, retroperitoneal lymphadenectomy. Its increasing incidence is due to the rise in the use of laparoscopic surgery and extensive lymphadenectomies.
- **Prevention** through tissue dissection using monopolar or bipolar as well as multiple lymphatic ligations.

Diagnosis

- **Clinical**: nausea, loss of appetite, increased abdominal girth.
- **Abdominal-pelvic CT**: intraperitoneal fluid collection that is indistinguishable from intestinal secretions, bile, urine, or simple ascites, although on occasion it forms a pathognomonic fat level mark (more visible if patient has spent time in supine position).
- **Diagnostic paracentesis**: milky, odorless, alkaline, and sterile liquid with a triglyceride content greater than 200 mg/dL and a protein content >3 g/dL.
- **Lymphoscintigraphy**: with Tc99m antimony, albumin, or dextran. The exact location of the fistula can be identified in order to plan surgical treatment.

Treatment

- **Conservative**: closure of the lymphatic fistula may require several weeks or up to 2 months. Success rate: 50-60%. Conservative treatment consists of:
  - Paracentesis.
  - Low-salt diet, high in protein and medium chain triglycerides.
  - Total parenteral nutrition (TPN).
  - Somatostatin: continuous infusion of 6 mg/24 h. Glycemia must be checked for alterations in its regulation.
- **Surgical**: indicated after failure of conservative treatment (after approx. 4-8 weeks):
  - Failure to identify fistulous point: use peritoneovenous shunt (LeVeen or Denver).
  - Success in identifying fistulous point: ligation/clipping or sealing with biological glue.
Postoperative chylos ascites

Paracentesis + diet

Cured

Not cured

TPN +/- Somatostatin

Not cured

SURGICAL

Fistulous point identified
  Fistulous point closed

Fistulous point not identified
  Peritoneovenous shunt