POSTOPERATIVE CHOLECYSTITIS FROM NATHANSON LIVER RETRACTOR DURING ROBOTIC-ASSISTED LAPAROSCOPIC PARTIAL NEPHRECTOMY

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Abstract

Proper visualization of the surgical field during any procedure is one of the most imperative elements of surgery. The tools used to obtain this goal come with their own set of risks. This report describes a patient who developed postoperative acalculous cholecystitis (PAC) after use of a Nathanson liver retractor. PAC is a rare complication of urologic surgery and is often more severe than acalculous cholecystitis (AC), leading to significant morbidity.

Case Description

A 66-year-old female underwent right-sided robotic-assisted laparoscopic partial nephrectomy for a 3.3 cm right upper pole renal mass. Due to the superior, posterior mediolateral location of the mass, it was required that the kidney be mobilized in its entirety. The liver was found to be redundant and required retraction. A Nathanson liver retractor was inserted into the abdomen under direct visualization. Upon approximately 60 minutes of use, the Nathanson liver retractor was removed from the abdomen under direct visualization.

Discussion

Partial nephrectomy has been cited as an independent risk factor for perioperative complications in laparoscopic surgery for urolithic cancer.

Complications from liver retraction have been cited as occurring in up to 25% of patients.

Although prior instances of liver injury from Nathanson liver retractor have been documented, we believe this to be the first recorded case of liver retractor-induced postoperative acalculous cholecystitis.

23%-47% of cases of PAC are acalculous and occur in elderly males.

Acalculous cholecystitis is associated with a poor prognosis as it has a high association with gangrene and perforation.

The mortality rate in critically ill patients with PAC is estimated to be as high as 53%.

Symptoms suspicious for PAC include fever, right upper quadrant pain, nausea, anorexia, and abdominal distention.

Prompt diagnosis and treatment are necessary and work-up should not be delayed if PAC is suspected.

References