Surgical Film

Safe dissection of high paraaortic lymph nodes superior to the renal vein in ovarian, primary peritoneal, or fallopian tube cancer by the “Komiyama’s maneuver”, a modification of Kocher’s maneuver

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HIGHLIGHTS

• Dissection of high paraaortic lymph nodes above the renal vein is often difficult.
• We developed a way of safely dissecting all paraaortic nodes, including high nodes.
• It involves completely mobilizing the small bowel with duodenum and right colon.

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ABSTRACT

Objective. High paraaortic lymph nodes superior to the renal vein are often involved by metastasis from advanced ovarian cancer, but are difficult to dissect. We developed a novel surgical technique for removing these nodes.

Methods. The ascending colon is displaced from the right paracolic gutter. A retroperitoneal incision is made cranially from the ileocecal region along Monk’s white line (fusion fascia) dorsal to the ascending colon. Incising the fusion fascia toward the root of the right renal vein from inside Gerota’s fascia allows separation of the right kidney and mobilization of the ascending colon, partly exposing the inferior vena cava. Then the inferior vena cava below the renal vein is exposed by dissecting the right ovarian vein. Next, Kocher’s maneuver is performed [1,2]. After mobilizing the duodenum, the inferior vena cava can be fully exposed below the left hepatic lobe. Then the peritoneum is incised from near the aortic bifurcation along the inferior mesenteric vein toward the ligament of Treitz, allowing complete mobilization of the small intestine and right hemicolon. Placing these viscera extra-abdominally in isolation bags provides excellent visualization of the entire aorta from the superior mesenteric artery to common iliac artery.

Results. This method can completely remove the high paraaortic nodes, followed by the paraaortic nodes inferior to the renal vein, without complications.

Conclusions. This surgical technique for dissection of the high paraaortic lymph nodes is convenient, safe, and easy to learn. It is considered to be advantageous for management of ovarian, primary peritoneal, or fallopian tube cancer.

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Conflict of interest statement
The authors made no disclosures.

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Appendix A. Supplementary data

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References
