Right upper quadrant peritonectomy. Answering frequently asked questions

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Removal of upper abdominal disease remains one of most challenging parts of surgery in advanced ovarian cancer. The right upper quadrant of the abdominal cavity is an anatomical region that generally is the most affected by cancer metastases in those patients. This video educational lecture is an attempt to answer the most frequently asked questions related to the technical aspects of the right upper quadrant peritonectomy procedure. [Video 1](#) We obtained these questions from a survey conducted for fellows and

early career gynecologic oncologists. The video lecture comprises the answers (A) to the preceding questions (Q) by graphic images and technical videos with corresponding voiceover.

- ▶ Q#1: Does the volume of right upper quadrant disease matter?
- ▶ A#1: (surgical video) Besides the volume the distribution of the disease rather matters. The Glisson's capsule and the coronary ligament of the liver are sometimes deeply infiltrated by the

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Video 1

Educational video lecture

tumor metastases and good expertise is needed to localize and dissect the critical vascular landmarks.

- Q#2: What are my critical vascular landmarks?
- A#2: (graphic scheme) The supra-hepatic vena cava and its tributaries such as the middle, right, and left hepatic veins are the first critical vascular landmarks. The second is the infra-hepatic vena cava.¹
- Q#3: Nice picture... But what does it look like in the reality?
- A#3: (graphic image from cadaveric dissection) The area of interest is shown. The anatomic relationships between the supra-hepatic cava, the liver, the diaphragm, and the pericardium are demonstrated.
- Q#4: How do I safely avoid the supra-hepatic vena cava?
- A#4: (surgical video) The right coronary ligament is being incised over the supra-hepatic vena cava and the para-vascular space, located just laterally to the right hepatic vein, is entered. This gives good visual control over this vascular landmark.²
- Q#5: How do I safely avoid the infra-hepatic vena cava?
- A#5: (surgical video) For good access to the infra-hepatic inferior vena cava and Morrison's pouch peritoneum the liver is manually retracted upwards and cephalad, the hepatic flexure of the colon is retracted caudad, and the duodenum is retracted medially. So, the inferior portion of the coronary ligament and the infra-hepatic vena cava are being visualized.³
- Q#6: What is the feature of the monopolar ball tip electrode that you use?
- A#6: (graphic scheme and surgical video) We consider that the 3 mm ball tip monopolar electrode is small enough for fine dissection, large enough for hemostasis, and it is cheap.
- Q#7: Are there other vascular landmarks that I need to pay attention to?

- A#7: (surgical video). The inferior phrenic veins should be respected while performing the liver mobilization and diaphragm stripping or resection.
- Q#8: How do I effectively handle the liver?
- A#8: (surgical video) The technique of safe liver handling and retraction using a laparotomy pad is demonstrated.
- Q#9: Can you please show me the entire procedure?
- A#9: (surgical video) The technique of trans-peritoneal right upper quadrant peritonectomy and diaphragm resection is demonstrated.

We hope that this video lecture will be useful for those who are interested in advanced ovarian cancer surgery.

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