Techniques for safe laparoscopic anterior resection for complicated diverticular disease

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In this video, we highlight tips and techniques for safe, laparoscopic takedown of a colovesicular fistula secondary to diverticulitis, outlining key steps and highlighting when change of technique is warranted.

The video shows the laparoscopic view of diverticular adhesions and the use of blunt dissection with appropriate traction to bring them down. When planes no longer become amenable to blunt dissection, we change approaches to the inferior margin, appropriately adjusting retraction.

Eventually, the limits of blunt dissection are reached, and only then is the use of selective monopolar cautery employed. This allows the liberation of dense adhesions to reach the appropriate anatomic plane, where blunt dissection resumes. On the whole, we recommend avoiding the use of energy devices during the dissection of the diverticular adhesions and fistula; this limits the risk of steering away from the natural plane, which increases the possibility of injury to adjacent structures (e.g. ureter). Given the dense adhesions, it can be difficult to know when the colovesicular fistula is being divided. In this case, there was no obvious bladder defect; regardless, suture repair of the bladder is rarely necessary. The mainstay of bladder healing in this situation is prolonged decompression with the Foley catheter.

This patient's intraoperative and postoperative courses were uncomplicated. Since the leak test was negative, there was no proximal diversion and he was discharged home on post-operative day number 4 with a Foley catheter in situ. A

computed tomography cystogram performed on post-operative day number 10 was negative and the Foley was removed.

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Compliance with ethical standards

Conflict of interest The authors have no conflicts of interest to declare.

Ethical approval Collecting and editing this video was done in compliance with ethical standards. As information is anonymized and the submission does not include images that may identify the person.

Informed consent Informed consent was not required.

Appendix

<http://youtu.be/CgjSfNSYkvM>.

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