
GIST

Pre-Operative Treatment & Surgical Approaches

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Eilber

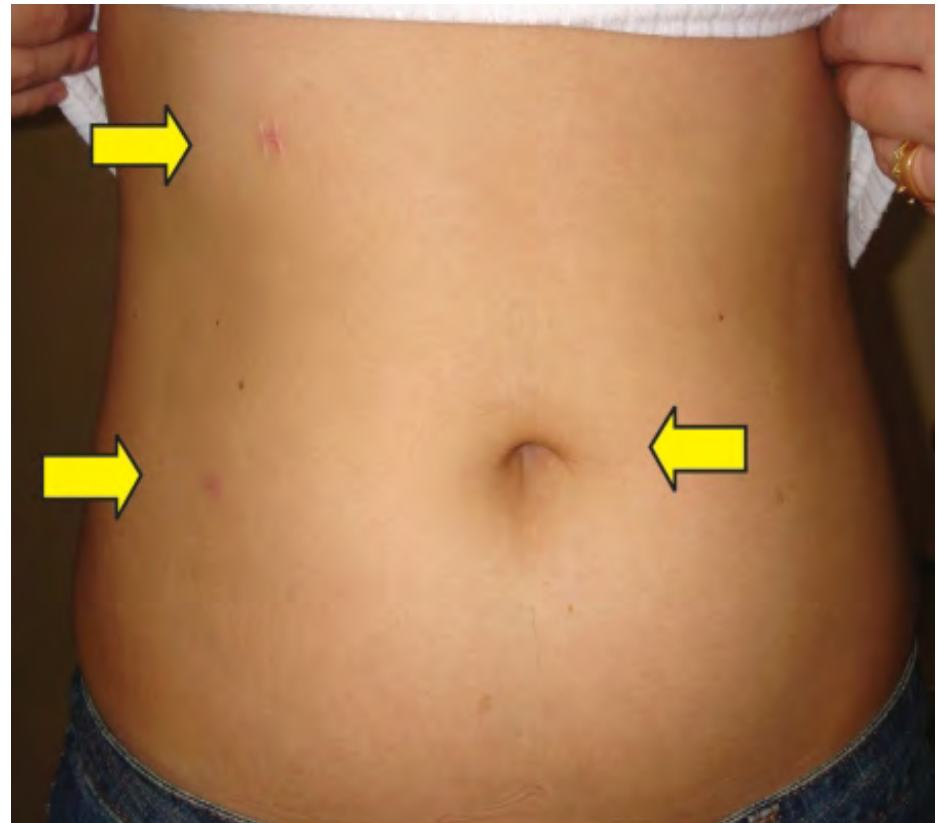
- UCLA GIST History
- General Principles of GIST Surgery
- Pre-Operative (Neoadjuvant) Therapy

Kadera

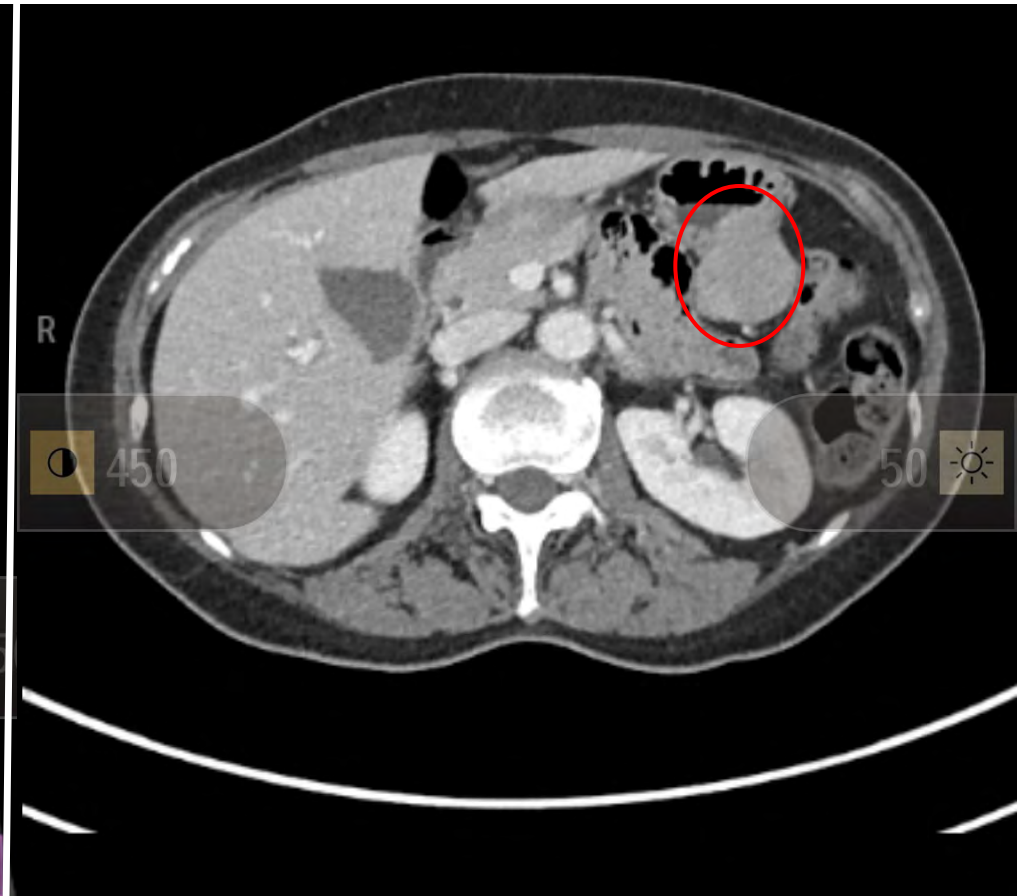
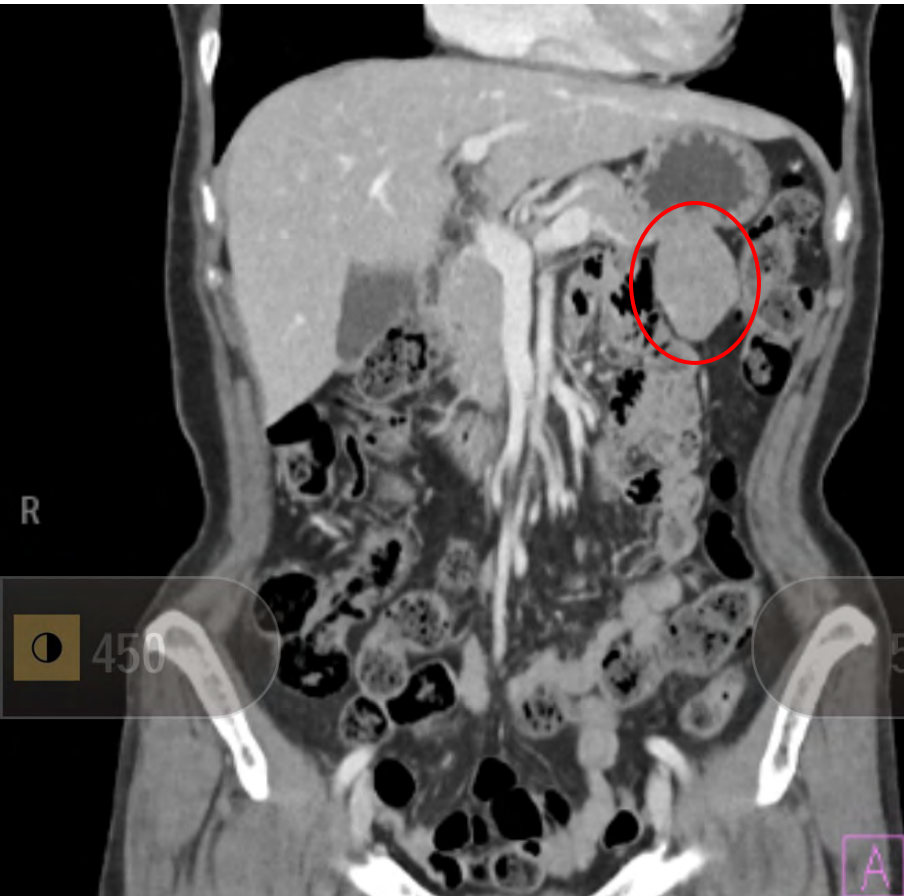
- Laparoscopic / Minimally Invasive GIST Surgery



Open versus laparoscopic incisions



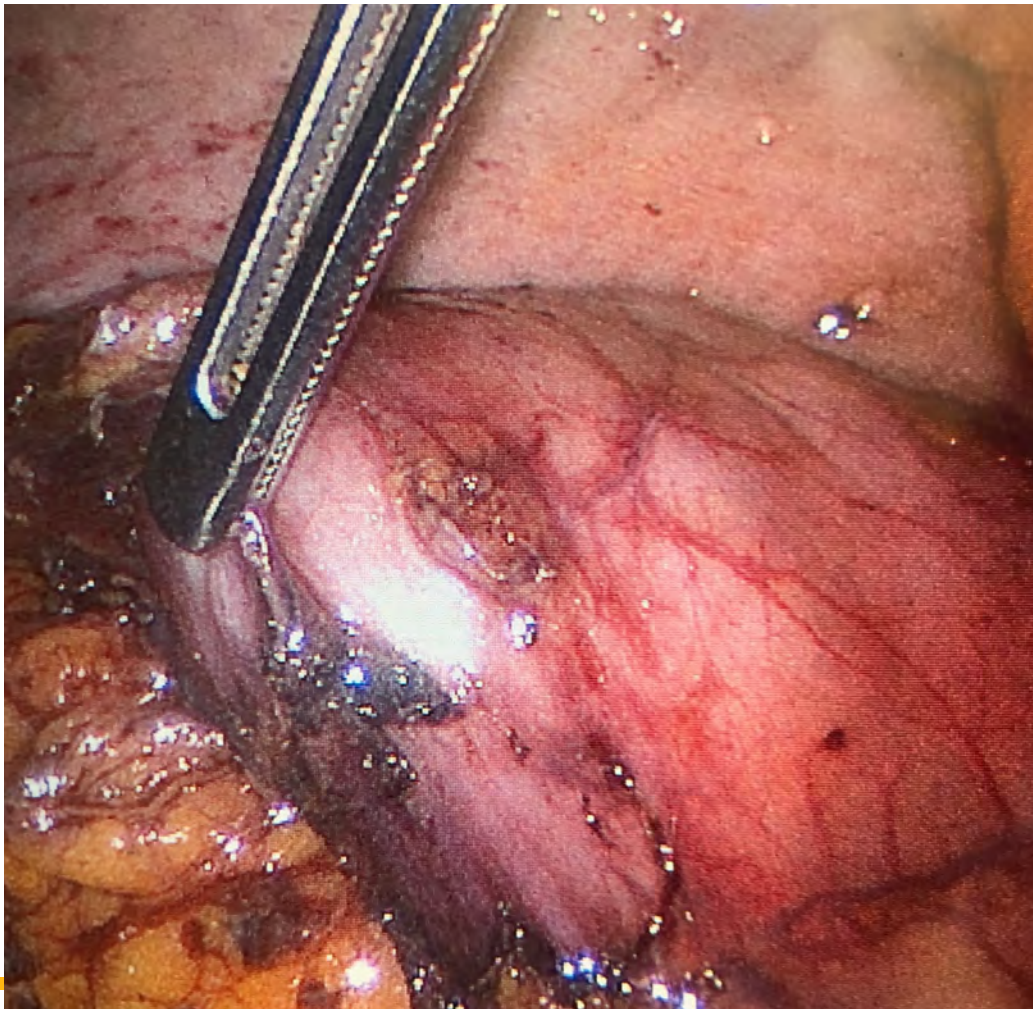
CT image of small exophytic gastric GIST



CT images courtesy of Camilo Correa, MD



Laparoscopic identification of small gastric GIST



Intraoperative photos courtesy of John Kunstman, MD



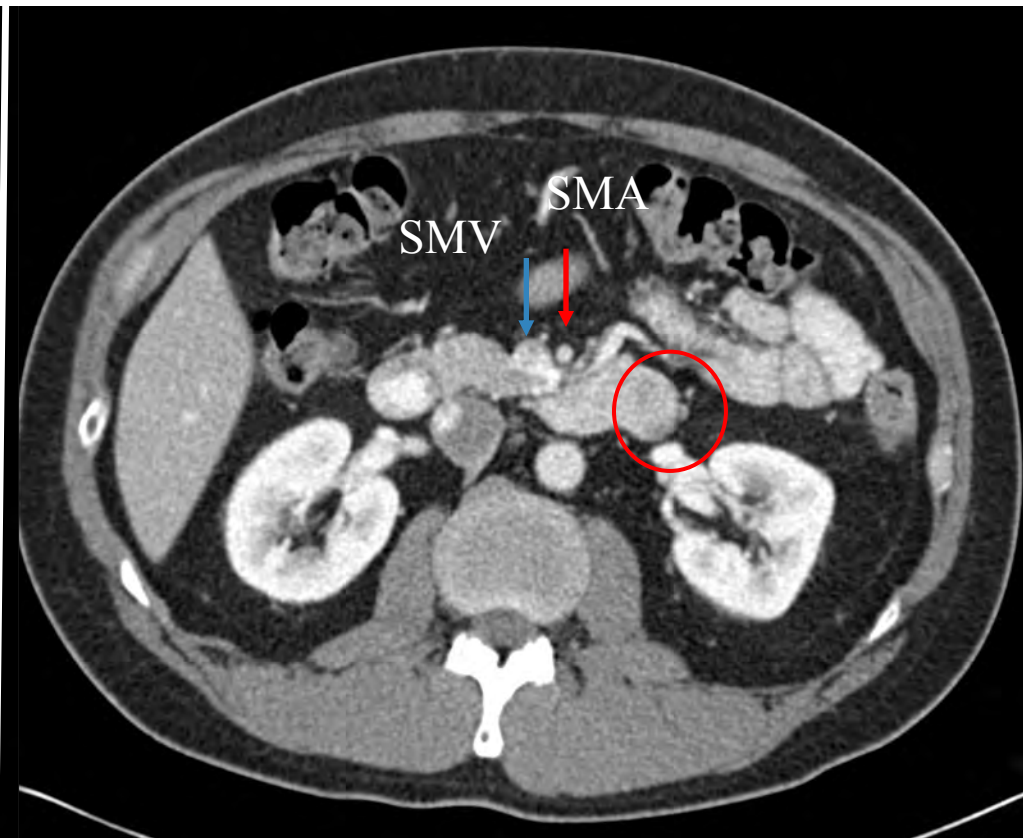
Minimally invasive treatment of GIST



- Decreasing morbidity of surgery
 - Small incisions, faster recovery
 - Less blood loss
- Technical concerns
 - Size
 - Location
 - Tumor rupture
 - Role of preoperative imatinib?



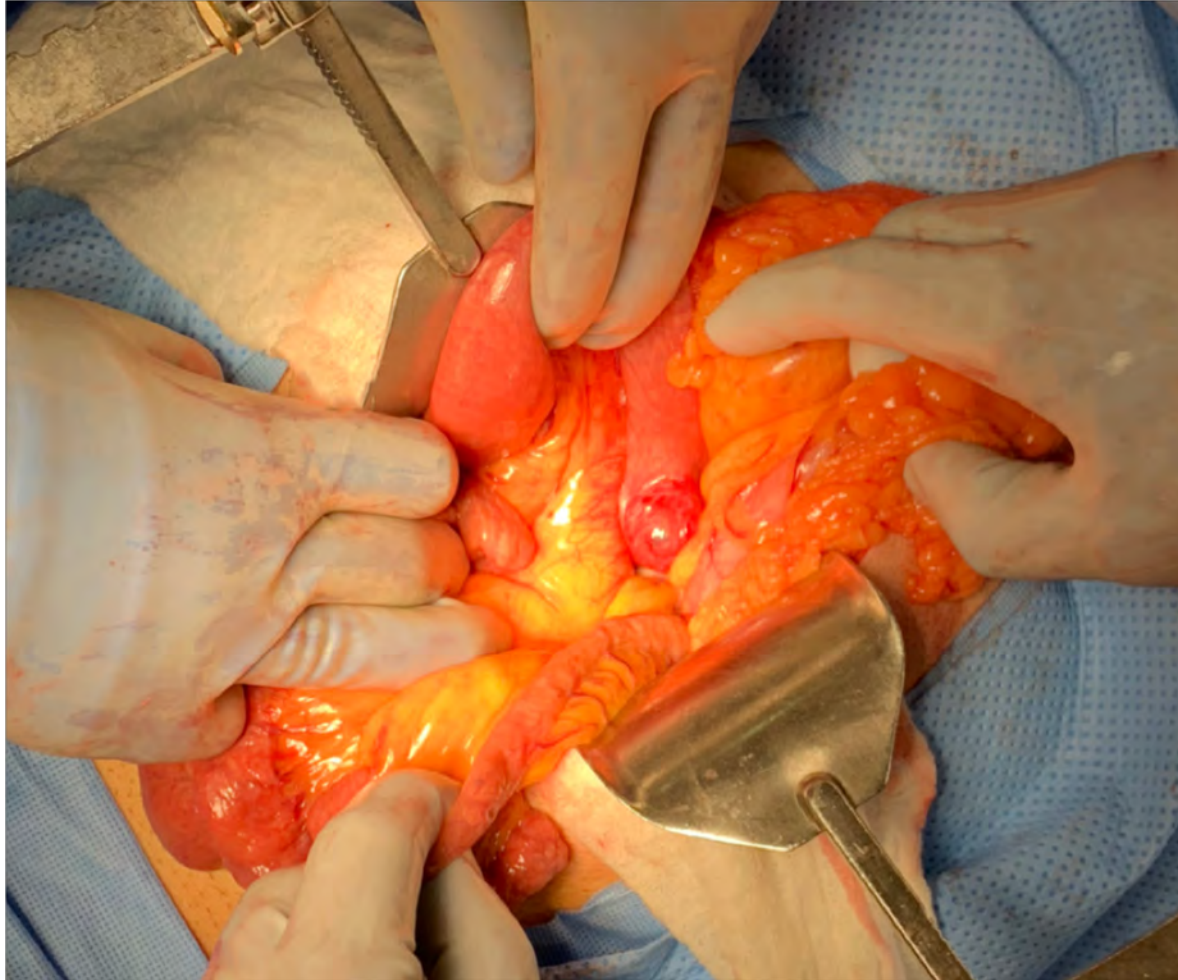
CT image of small duodenal GIST



SMA = superior mesenteric artery
SMV = superior mesenteric vein

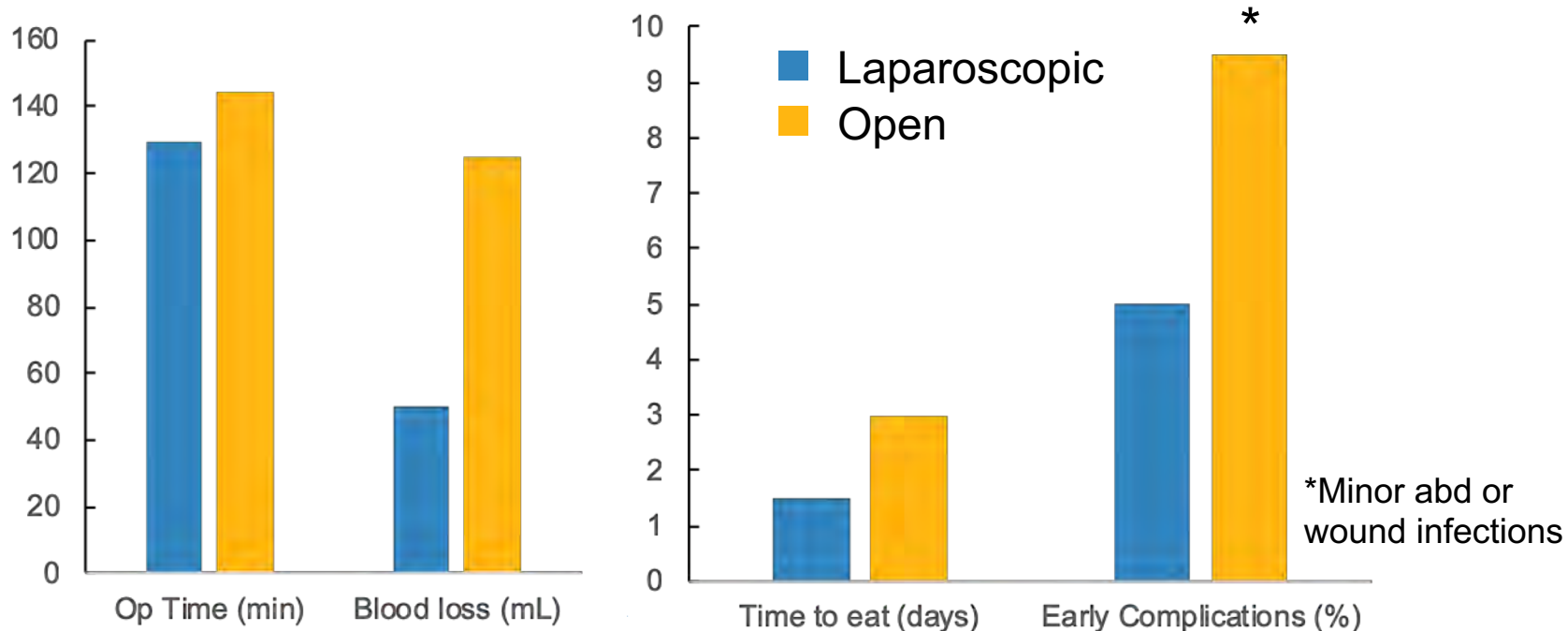


Open approach to duodenal GIST



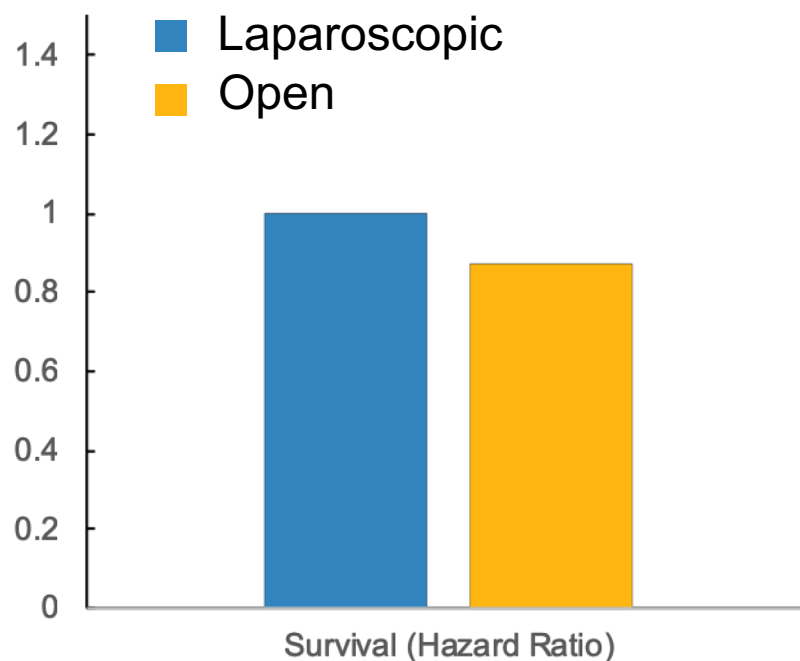
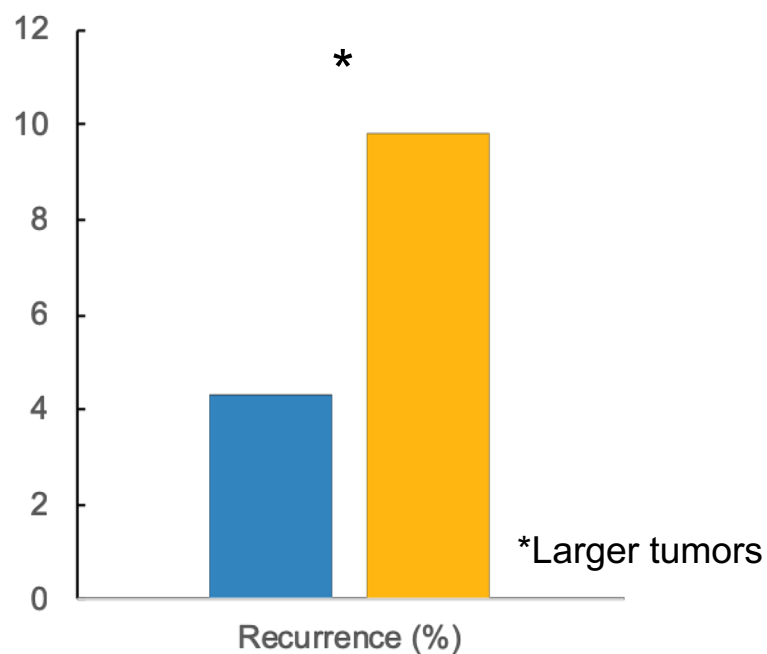
Laparoscopic versus open treatment of GIST

- Meta-analysis of 28 studies comparing laparoscopic versus open technique
 - Mean tumor size = 4.54 cm lap group (n = 1,000 patients)
5.67 cm open group (n = 1,169 patients)



Laparoscopic versus open treatment of GIST

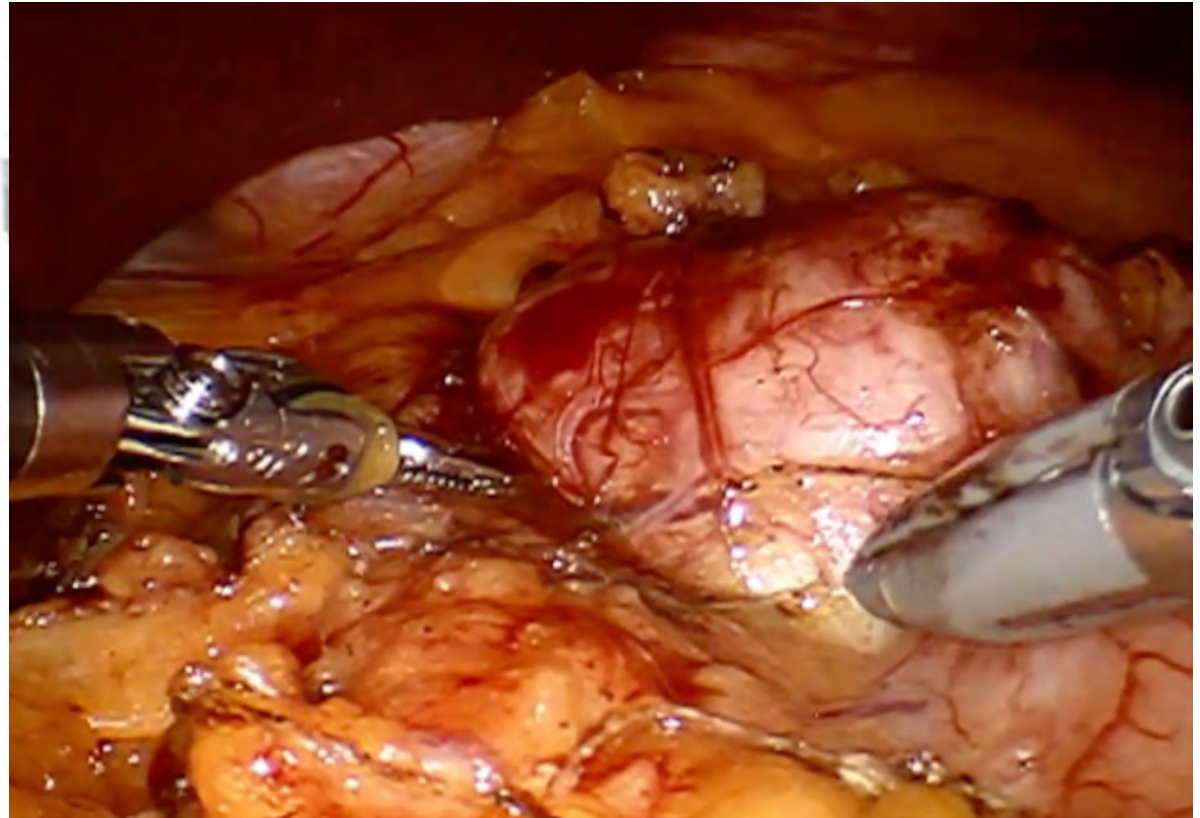
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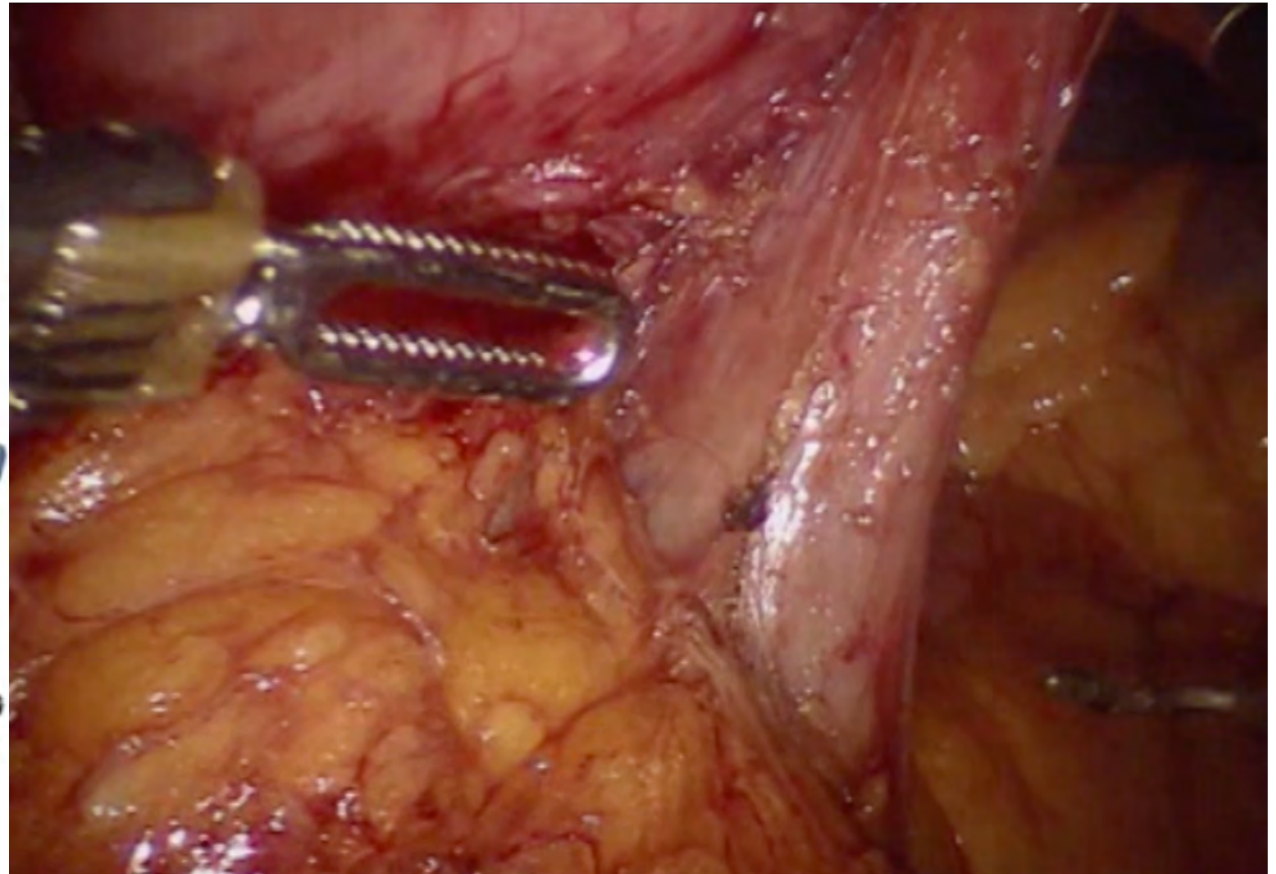
Robotically-assisted approach to GIST



Robotically-assisted approach to gastric GIST



Robotically-assisted approach to duodenal GIST



Video courtesy of Mark Girgis, MD



Minimally invasive treatment of GIST

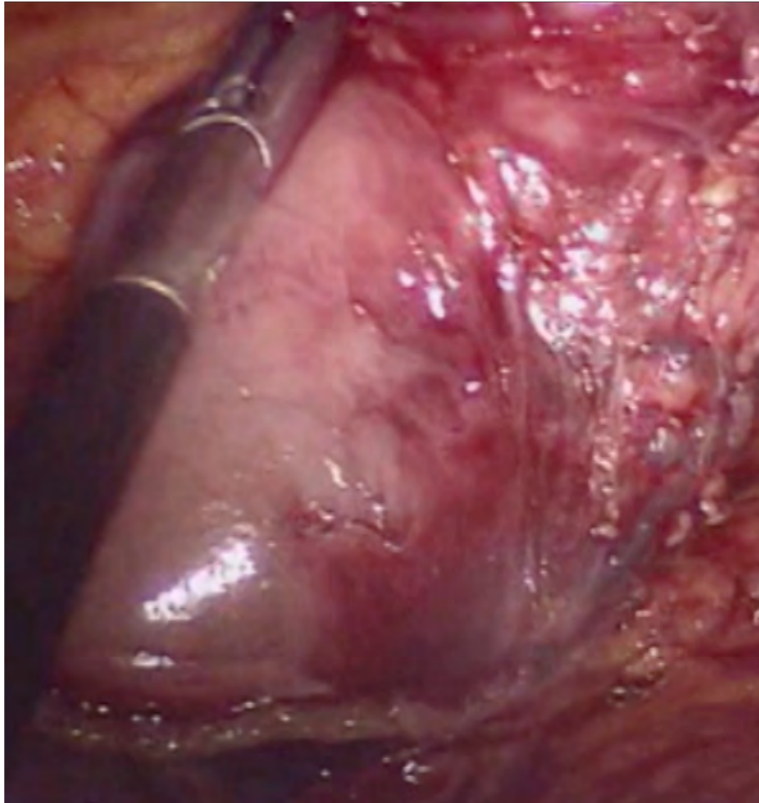


Photo courtesy of Mark Girgis, MD

- Summary
 - Laparoscopic technique is safe in well-selected cases
 - Smaller tumor size
 - Accessible location
- Areas of research
 - Safety of robotically-assisted approach
 - Increased dexterity at the expense of tactile feedback
 - Preoperative treatment with imatinib reduce risk of tumor rupture?

