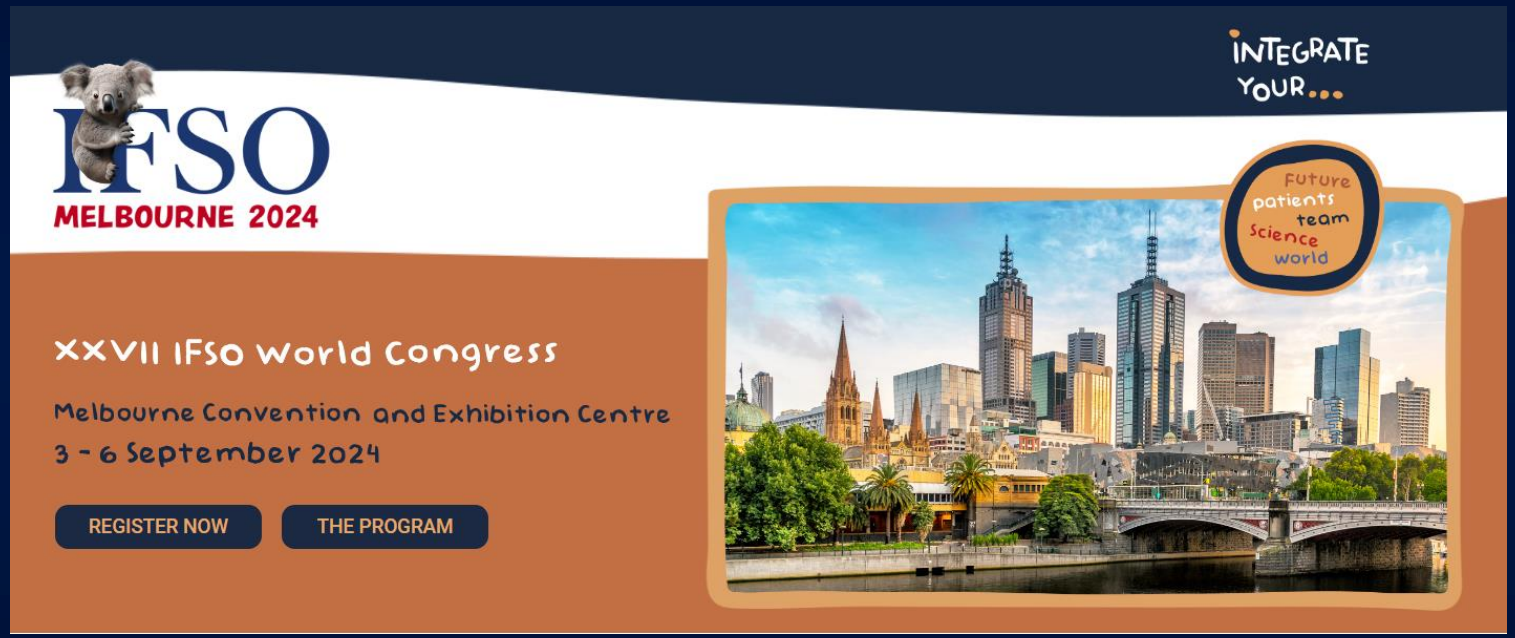
Jejuno-jejunostomy complications early after Roux-en-Y gastric bypass



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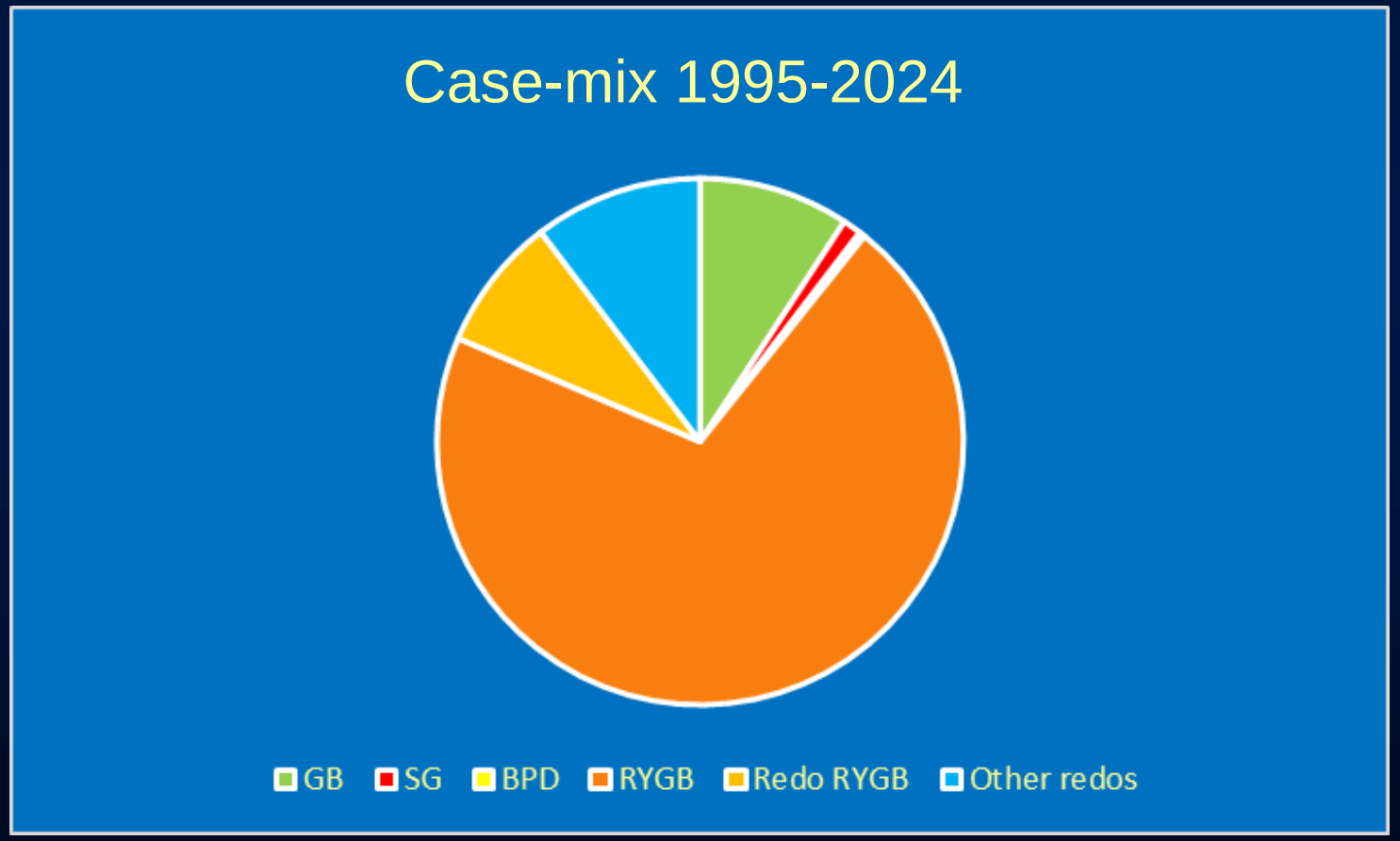
Disclosures

Nothing to disclose



Aims

- Describe complications at JJ
- Diagnosis and treatment

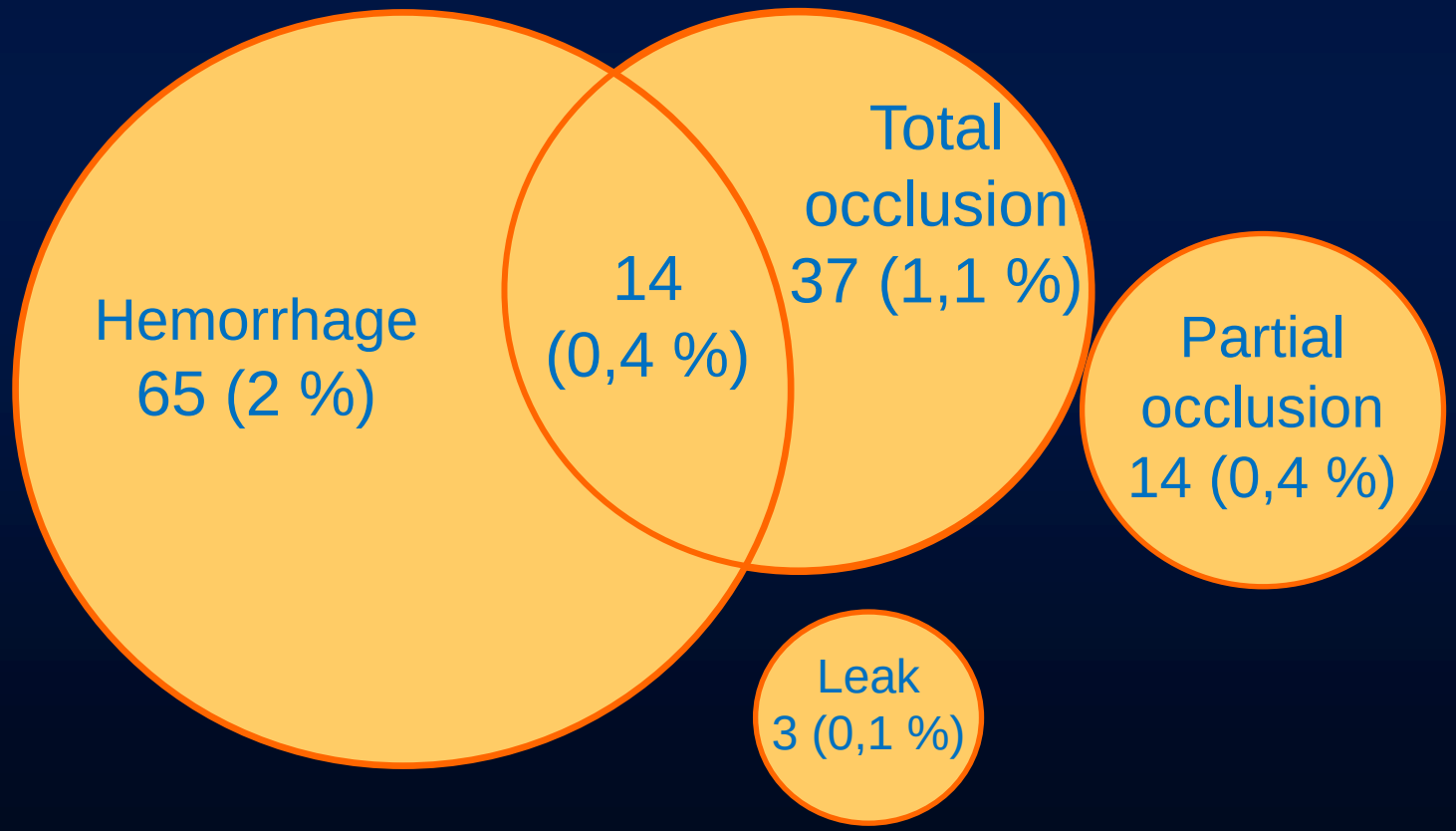
Methods

- Retrospective study based on prospectively maintained database over 25 years (3232 laparoscopic RYGB)
- All hemorrhages of unknown origin considered to originate from JJ

Results: complications

Total patients with JJ-related complication: 105 (3,2%)

Total patients with CD ≥ 3B JJ complication: 42 (1,3%)



Treatment

- Conservative in 63 cases
  - Hemorrhage: stop enoxaparine, etamsylate, ± transfusions
  - Patial occlusion: dietary counseling, corticoids
- Reoperation (s) in 42 cases
  - Enterotomies for hemostasis
  - Enterotomy for clot removal and gastrostomy if BPL obstructed
  - Oversewing for leak with lavage and drainage
  - Correction of kink or other default (twist, torsion) of JJ
  - Gastrostomy for decompression if massive dilation of excluded stomach

Original article

Surgical management of obstructing clot at the jejunojejunostomy after gastric bypass: a single center experience and literature review

Donald T. Hess, M.D.*, Hassan Beesley, B.S., Cullen O. Carter, M.D., Brian J. Carmine, M.D., Luise I. M. Pernar, M.D.

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Surgery for Obesity and Related Diseases 17 (2021) 765–770

- 2279 RYGB from July 2009 to December 2019
- 10 (0,4 %) patients with obstruction at JJ due to blood clots

Original article

Surgical management of early small bowel obstruction after laparoscopic Roux-en-Y gastric bypass

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Bariatric and Metabolic Institute, Cleveland Clinic, Cleveland, Ohio

Surgery for Obesity and Related Diseases 9 (2013) 718–724

- 2126 RYGB from April 2004 to December 2011
- 11 (0,5 %) patients with early SBO (all reoperated)

Early small bowel obstruction after laparoscopic gastric bypass: a surgical emergency

Jad Khoraki, M.D.[a], Guilherme S. Mazzini, M.D., Ph.D.[a,b], Amar S. Shah, M.B.A., M.D.[a], Paul A.R. Del Prado, M.D.[a], Luke G. Wolfe, M.S.[a], Guilherme M. Campos, M.D., Ph.D., F.A.C.S., F.A.S.M.B.S.[a,*]

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Surgery for Obesity and Related Diseases 14 (2018) 1118–1125

- 1717 RYGB from January 2000 to June 2017
- 29 (1,7 %) patients developed early SBO (23 reoperated)

Diagnosis

- Hemorrhage
  - Melaena, hematemesis, hypotension, tachycardia, Hb drop
- Obstruction
  - Vomiting (if alimentary limb / common limb occluded)
  - Nausea
  - Fullness
  - Upper abdominal pain
  - Tachycardiy
- High index of suspicion, CT-scan

Treatment options

- Leak + peritonitis: reoperation
- Hemorrhage:
  - Stable, no SBO: stop anticoagulants, ICD, pro-coagulant
  - Unstable despite resuscitation: exploration/hemostasis
  - With SBO involving BPL: reoperation
- SBO:
  - Stable, only alimentary limb affected: wait and see, corticoids
  - Unstable, BPL and excluded stomach affected: reoperation

    decompression gastrotomy at beginning of procedure to avoid massive contamination

Prevention

- Hemorrhage
  - Visual control during surgery, bipolar cautery/clips
  - Raise blood pressure while doing the JJ
  - Hand-sewn JJ ? Avoid ketorolac ?
- Obstruction
  - Avoid anti-mesenteric boarder of the alimentary limb, prefer 3 or 9 o'clock position for BPL depending on its position
  - Anti-obstruction stitch (Brolin stitch)
  - Double or bidirectional firing of linear stapler (risk of bleeding)
  - Avoid hemorrhage
  - Divide mesentery with antecolic technique

Conclusions

- Early complications at the JJ affect 2-3 % of patients after RYGB
- Leaks at the JJ are exceptional and related to technical issues
- Hemorrhage is the commonest JJ complication and leads sometimes to its obstruction with BPL dilation
- Obstruction is an surgical emergency if it affects the BPL/gastric remnant
- Careful surgical technique may prevent most problems

Thank you for your attention