

Napoli SURGERY



NAPOLI 27 – 28 SETTEMBRE

Aula Magna Scuola di Medicina di Scampia
Centro Congressi Università degli Studi di Napoli Federico II
Via Valerio Verbano Snc, Scampia - Napoli

CON IL PATROCINIO DI:



ORE 17:15

Le Urgenze bariatriche come gestirle. *Sonia Chiappetta*
Commento di *Vincenzo Pilone*

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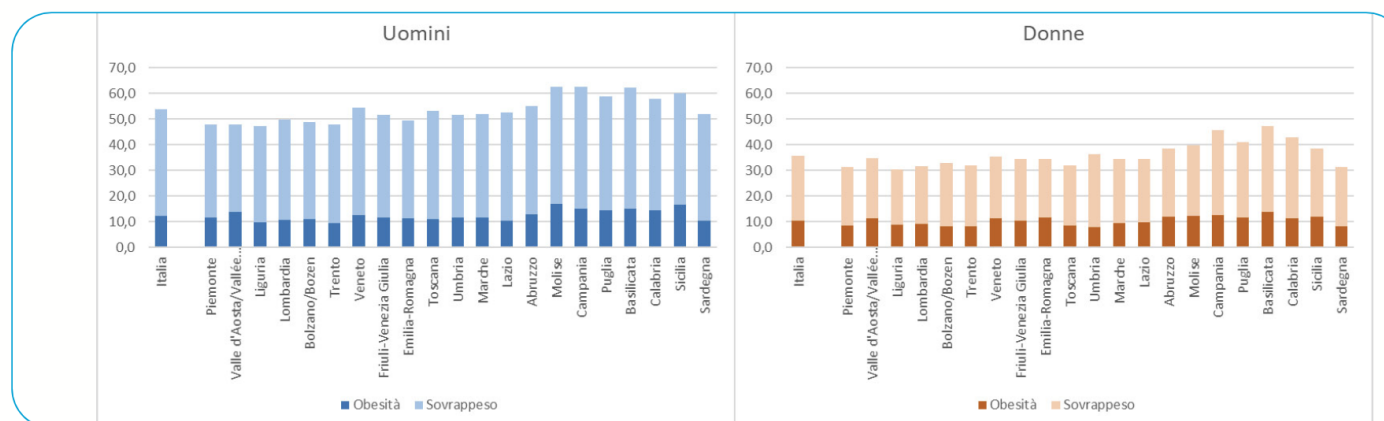
1.1 La geografia dell'eccesso di peso

La quota di popolazione adulta in eccesso di peso nel 2021 varia dal 39,8% del Nord-Ovest al 43,0% circa nel Nord-Est e al Centro, sale al 47,0% nelle Isole e al 51,5% del Sud (tassi standardizzati). Si conferma pertanto il noto gradiente territoriale che vede una maggiore diffusione dell'eccesso di peso nel Meridione del paese. I dati territoriali per genere presentano per le donne tassi molto più bassi rispetto agli uomini, tuttavia in entrambi i sessi si conferma il gradiente Nord-Sud (Figura 2). Il valore minimo dell'eccesso di peso si registra in Liguria sia negli uomini (47,2%) sia nelle donne (30,3%), mentre il valore

massimo negli uomini si rileva in Campania (62,6%) e nelle donne in Basilicata (47,1%). Il divario di genere è massimo in Toscana (53,0% negli uomini e 31,9% nelle donne) e in Sardegna (51,8% vs. 31,2%). Per l'obesità si osserva una maggiore variabilità territoriale, con il valore minimo per gli uomini adulti nella Provincia autonoma di Trento (9,5%) e per le donne adulte in Umbria (7,8%), mentre i valori massimi si registrano rispettivamente in Molise (16,9%) e in Basilicata (14,0%). Per questo indicatore le differenze di genere sono più elevate in Umbria (11,8% negli uomini e 7,8% nelle donne) e in Sicilia (16,8% vs. 11,9%).

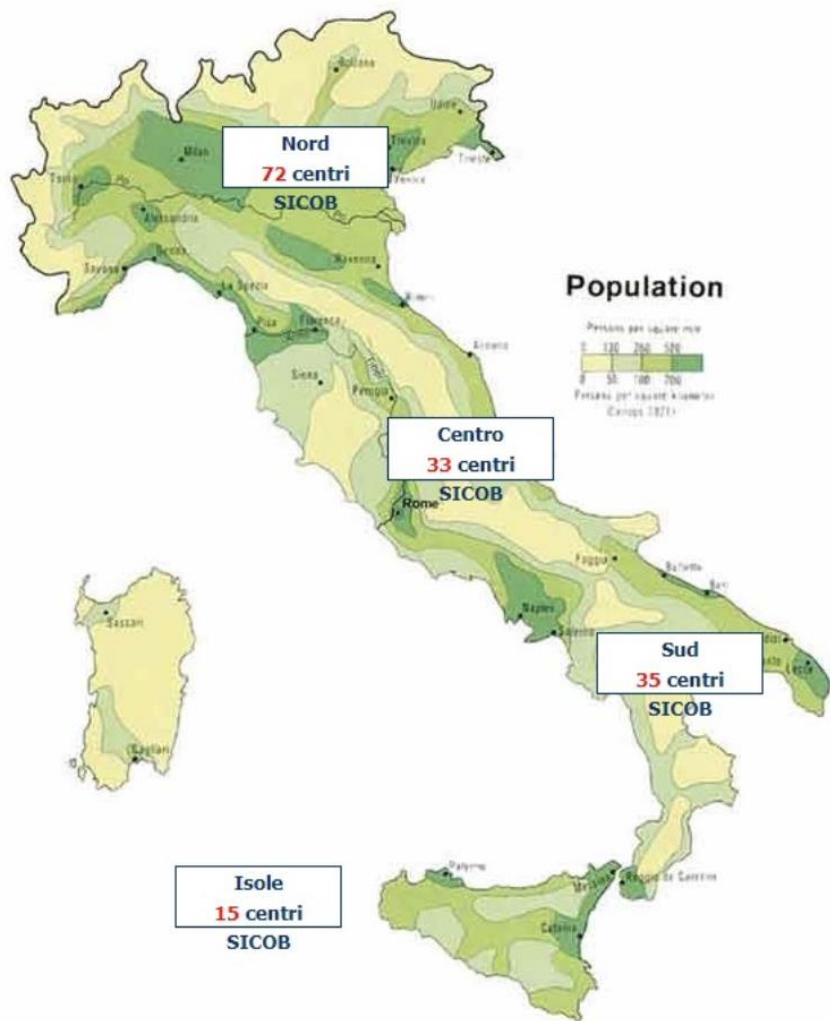
La quota di popolazione adulta in eccesso di peso nel 2021 in Italia: **46.2%** - **12% con obesità** -

Figura 2. Persone di 18 anni e più in sovrappeso e obesità per genere e regione. Anno 2021 (tassi standardizzati per 100 persone)



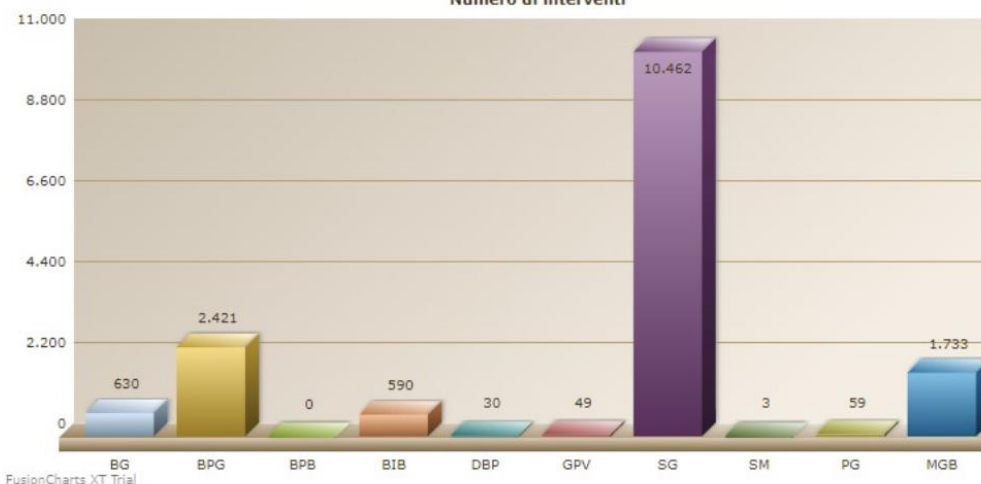
Fonte: Istat, Indagine aspetti della vita quotidiana.

Selezionare l'anno 2022



TIPO DI INTERVENTO	CASISTICA	MASCHI	FEMMINE	ETA'		
				Media	Min	Max
Bendaggio gastrico	630	101	529	40,89	16	78
By pass gastrico	2.421	558	1.863	46,95	19	72
By pass biliointestinale	0	0	0	0,00	0	0
Pallone intragastrico	590	171	419	38,65	12	73
Diversione biliopancre.	30	6	24	51,07	31	67
Gastroplastica verticale	49	11	38	47,37	18	69
Sleeve gastrectomy	10.462	2.673	7.789	42,61	11	79
Super Magenstrasse	3	0	3	46,08	11	73
Plicatura gastrica	59	10	49	48,39	22	62
Mini gastric bypass	1.733	449	1.284	46,08	11	73
TOTALI	15.977	3.979	11.998			

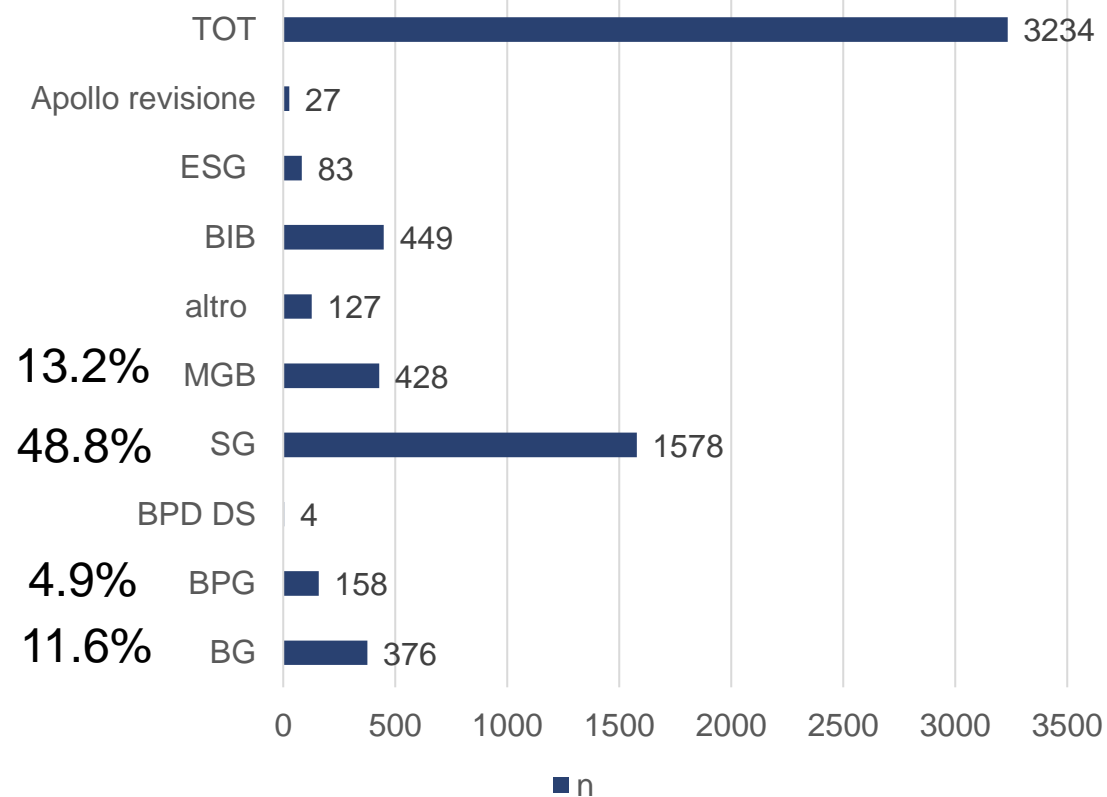
STATISTICHE NAZIONALI ANNO 2022
Numero di interventi



15 centri SICOB



n



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Dettaglio	Centro Affiliato	Alberto Porcelli	Luigi Prisco		Casa di Salute Santa Lucia	Campania	san giuseppe vesuviano
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Dettaglio	Centro Affiliato	Finelli	Scognamiglio Giuseppe		Presidio Ospedaliero S. Maria Della Pietà	Campania	Casoria

BENCHMARKS

Defining Global Benchmarks in Bariatric Surgery

A Retrospective Multicenter Analysis of Minimally Invasive Roux-en-Y Gastric Bypass and Sleeve Gastrectomy

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 Simon van de Vrande, MD,‡‡‡ Sonja Chiappetta, MD,§§§ Emanuele Lo Menzo, MD,¶¶¶
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 Steffi Rothe, MBA,†††† Gerhard Prager, MD,†††† Dimitri J. Pournaras, MD, PhD,†††† Ricardo Cohen, MD,|||||
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 Antonio Torres, MD, PhD,††† Kelvin Higa, MD,*** Richard Welbourn, MD,|||| Marcos Berry, MD,¶¶¶
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 Torsten Olbers, MD, PhD,**¶¶¶ Matias Sepúlveda, MD,¶ Eric J. Hazebroek, MD, PhD,§
 Bruno Dillemans, MD,‡ Roxane D. Staiger, MD,* Milo A. Puhán, MD, PhD,|||||||
 Ralph Peterli, MD,**** and Marco Bueter, MD, PhD*✉

ANNALS OF SURGERY

Defining Global Benchmarks in Elective Secondary Bariatric Surgery Comprising Conversional, Revisional, and Reversal Procedures

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 Dimitri A. Raptis, MD, MSc, PhD,**** and Marco Bueter, MD, PhD*✉

TABLE 1. Criteria Used to Identify Participating Centers and “Benchmark” Cases

Center Inclusion Criteria	Patient Inclusion Criteria	Patient Exclusion Criteria
Annual caseload ≥ 200 bariatric cases, at least during the last year of the study period ^{19,20}	Age 18–65 yrs ^{21–23}	Previous intra-abdominal surgery (including previous bariatric surgery) ^{24,25}
Minimum 30 benchmark cases over the 5-yr study period for inclusion in the procedure-specific (RYGB or SG) establishment of global benchmarks	Low risk profile (please read “exclusion criteria”)	Cardiovascular disease (eg, cardiac arrhythmia, stroke, coronary artery disease) ²²
Available prospective bariatric database	Preoperative BMI ≤ 50 kg/m ² ^{26,27}	History of thromboembolic events and/or therapeutic anticoagulation ²⁷
Interest in bariatric outcomes, documented by ≥ 1 publication(s) on bariatric surgery “Clinical excellence” or national reference centers ¹⁸	Laparoscopic primary Roux-en-Y gastric bypass or sleeve gastrectomy ²⁴	Diabetes mellitus (Type 1 and Type 2, as defined by the American Diabetes Association) ^{28,29}
	Documented follow-up of at least 90 d ³⁰	Obstructive sleep apnea (recurrent episodes of upper airway collapse during sleep) ^{26,27}
	American Society of Anesthesiologists (ASA) score $< IV$ ³¹	Chronic obstructive pulmonary disease (FEV1/FVC < 0.7) ²⁴
		Chronic kidney disease (eGFR < 30 mL/min/1.72 m ²) ²²
		Inflammatory bowel disease (ulcerative colitis, Crohn disease) ³²
		Immunosuppression therapy (ie., steroids, calcineurin inhibitors, etc.) ^{33,34}
		Associated surgical procedures (ie., cholecystectomy, hiatoplasty, liver biopsy) ¹⁷

5.5% 90 days READMISSION rate

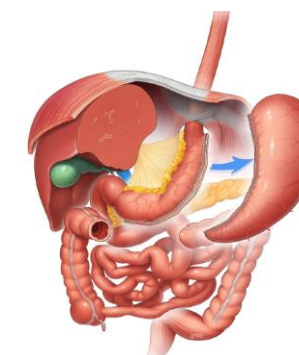
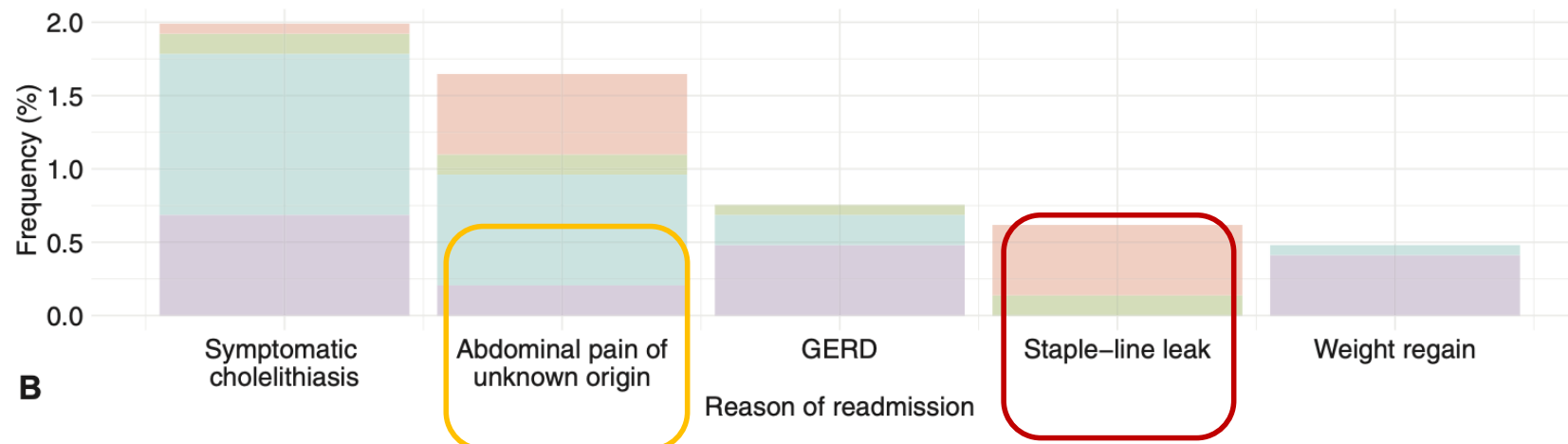
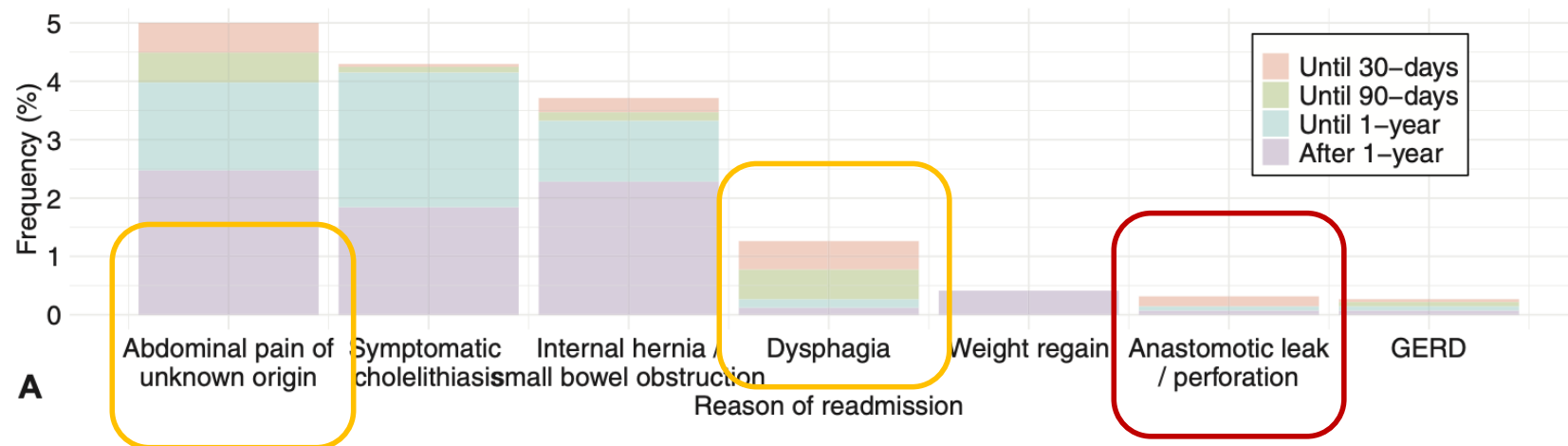


FIGURE 3. Cumulative incidence (%) of the most common reasons for readmission in benchmark patients after bariatric surgery. A, Roux-en-Y gastric bypass (n = 4120, median follow-up = 1.9 yr, [range: 0.25–6 yrs]). B, Sleeve gastrectomy (n = 1457, median follow-up = 1.6 yr, [range: 0.25–6 yrs]). GERD indicates gastro-esophageal reflux disease.

ASMBS Guidelines/Statements

Bariatric emergencies for the general surgeon

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backgrounds [5–8]. As the global obesity epidemic has persisted over the past several decades, the demand for MBS has increased, such that MBS is now one of the most commonly performed elective operations in general surgery with more than 250,000 annual operations performed in the United States [9,10]. The growing potential for acute postsurgical presentations of patients who have undergone MBS in emergency rooms has been recognized [11].

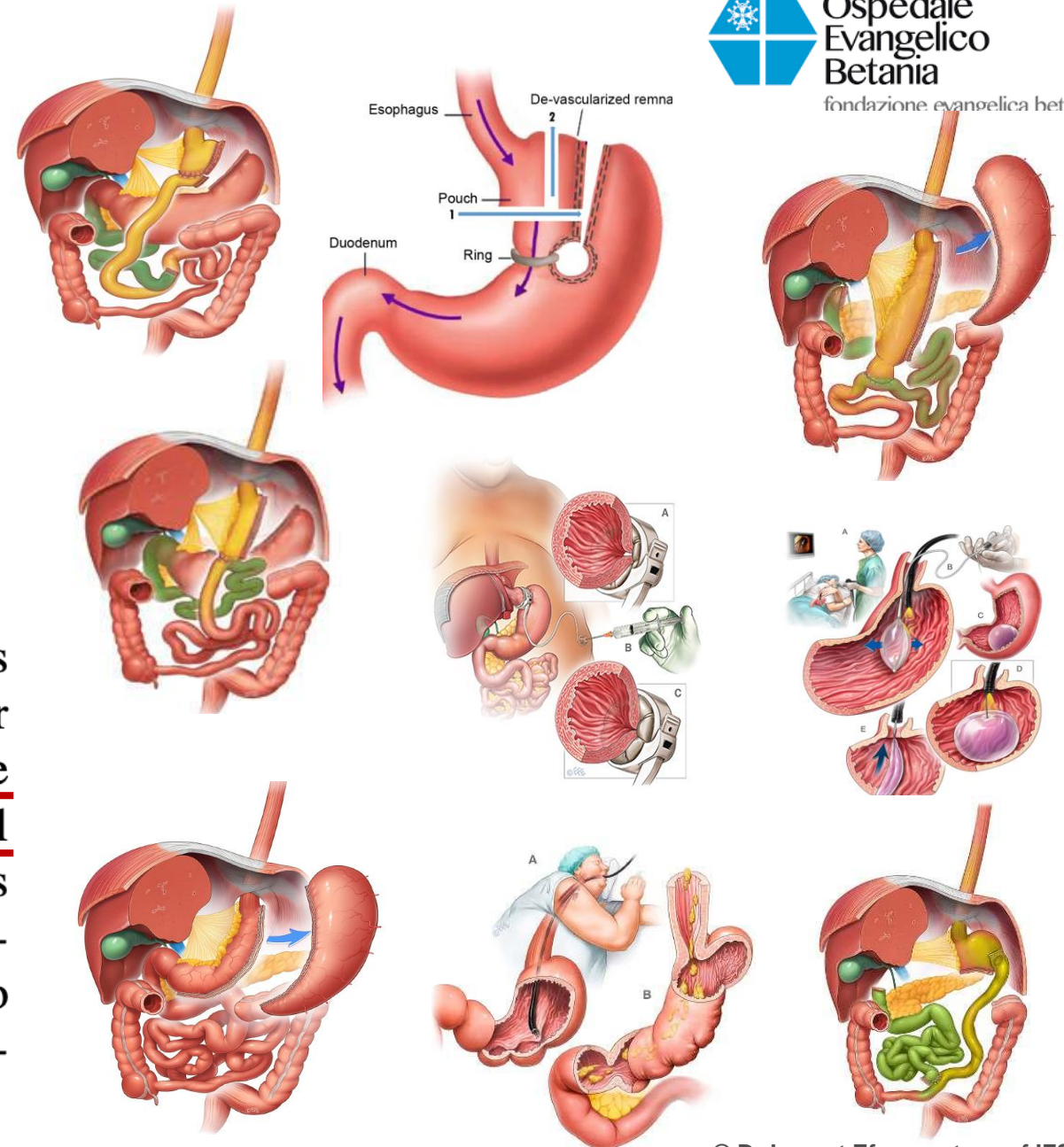


Table 1
Final recommendations based on diagnosis

Diagnosis	Recommendations
GI leak	<ul style="list-style-type: none"> • GI leaks result in significant morbidity and contribute to postoperative mortality. The timing of a leak after surgery can be helpful to determine the acuity of presentation and the trajectory of symptoms. • Delays in diagnosis worsen outcomes and should be avoided. A high level of suspicion, timely detection, and early intervention help minimize morbidity and mortality. • In hemodynamically stable patients, CT imaging with IV \pm oral contrast can be useful to secure the diagnosis and localize the leak. Negative imaging does not rule out a leak in patients with a high index of suspicion. Thus, unexplained persistent tachycardia may warrant surgical exploration. • In clinically stable patients, there is a role for nonoperative management including antibiotics, image-guided percutaneous drainage, endoscopic therapy, and nutritional support. • Definitive surgical planning should be done in collaboration or consultation with a metabolic bariatric surgeon if available after the patient is stabilized and the leak site is identified and controlled in the initial phase of treatment.
MU	<ul style="list-style-type: none"> • The need for urgent intervention for MU is uncommon in the absence of perforation or bleeding. • A patient with perforated MU presents to the emergency room with signs and symptoms consistent with a perforated viscus, including localized or generalized sepsis. Most such patients will have a prior diagnosis of MU and a history of abdominal pain, but for some patients, perforation will be the initial presentation. • Diagnosis can be made with an upright chest x-ray demonstrating free air, upper GI series, or CT scan. • After resuscitation and administration of broad-spectrum antibiotics, operative repair with an omental patch, appropriate wide drainage, and consideration for a feeding/drainage tube in the excluded stomach is the preferred treatment. • Significant upper GI bleeding due to MU can present acutely with hematemesis, melena, and/or hemorrhagic shock. Upper endoscopy can be diagnostic and therapeutic. Surgical exploration is rarely needed but may be necessary if other modalities fail.
Gastric band	<ul style="list-style-type: none"> • The number of patients with gastric bands in situ is still significant, and general surgeons should be familiar with the AGB placement procedure and its complications. • Urgent complications of AGB are uncommon but include band slippage and erosion with perforation. • Initial management of band slippage includes aspiration of band fluid. If the slippage does not resolve after decompression, surgery is indicated for band removal. • Patients with band erosion may be asymptomatic or can present with loss of restriction or weight regain, vague epigastric pain, bleeding, port-site infection, or intra-abdominal abscess. Emergent surgery is seldom needed for a band erosion. However, if a patient is unstable or has peritoneal signs, urgent band removal and drainage is required to control sepsis.

Bowel obstruction

- While all bariatric procedures are susceptible to adhesive bowel obstruction similar to other laparoscopic abdominal operations, procedures with intestinal have the additional potential risk of internal hernia, closed-loop obstruction, and intussusception, which are associated with high morbidity and mortality.
- An internal hernia may present with nonspecific acute or intermittent symptoms, and diagnosis requires a high index of suspicion. A CT scan is an adjunct in the diagnostic workup; however, a negative study cannot exclude it. Due to the devastating consequences of bowel strangulation, early suspicion and timely surgical exploration are critical.
- Intussusception often involves the JJ and has the risk of bowel ischemia and strangulation. A CT scan can help aid the diagnosis; however, a normal CT scan does not rule out intussusception, and early surgical exploration should be considered in RYGB patients with acute abdominal pain and bowel obstruction.
- The most common surgical procedure for intussusception involving the JJ, with the lowest incidence of recurrence, is revision of the anastomosis.
- Emergent transoral ERCP may not be feasible in patients who underwent MBS involving GI bypass.
- Laparoscopic-assisted ERCP through the remnant stomach is often the best approach to the papilla in the emergent setting.
- Patients with PVT can present acutely 1–3 wk after surgery with abdominal pain, nausea, and possibly intermittent emesis.
- Abdominal CT scan demonstrates the portomesenteric venous thrombus.
- Treatment includes rehydration and anticoagulation.
- Surgical exploration is reserved for patients with suspected bowel ischemia.

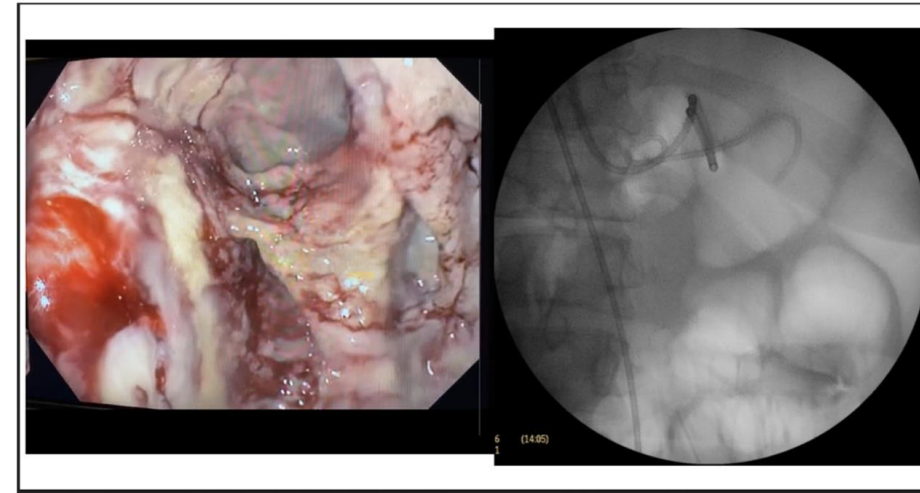
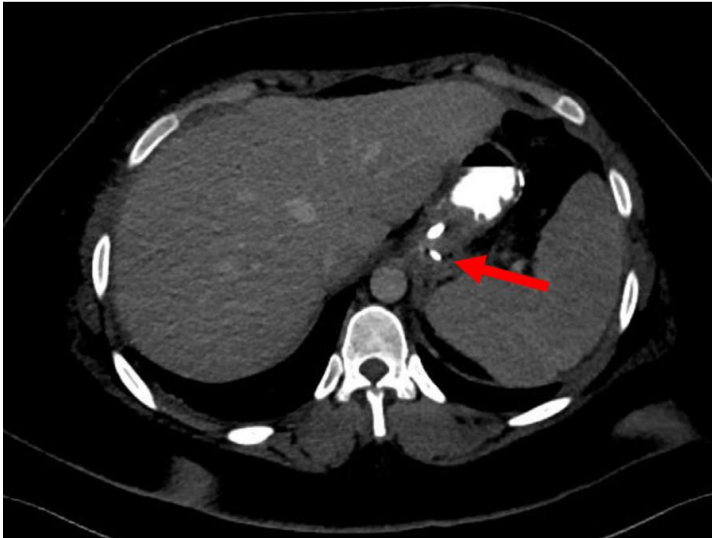
Biliary disease after RYGB PVT

GI = gastrointestinal; CT = computed tomography; IV = intravenous; MU = marginal ulcer; AGB = adjustable gastric band; JJ = jejunojejunal; RYGB = Roux-en-Y gastric bypass; ERCP = endoscopic retrograde cholangiopancreatography; MBS = metabolic and bariatric surgery; PVT = portomesenteric vein thrombosis.

Table 1
Final recommendations based on diagnosis

Diagnosis	Recommendations
GI leak	<ul style="list-style-type: none">• GI leaks result in <u>significant morbidity and contribute to postoperative mortality</u>. The timing of a leak after surgery can be helpful to determine the acuity of presentation and the trajectory of symptoms.• Delays in diagnosis worsen outcomes and should be avoided. A high level of suspicion, timely detection, and early intervention help minimize morbidity and mortality.• In hemodynamically stable patients, CT imaging with IV \pm oral contrast can be useful to secure the diagnosis and localize the leak. <u>Negative imaging does not rule out a leak in patients with a high index of suspicion. Thus, unexplained persistent tachycardia may warrant surgical exploration.</u>• In clinically stable patients, there is a role for nonoperative management including antibiotics, image-guided percutaneous drainage, endoscopic therapy, and nutritional support.• Definitive surgical planning should be done in collaboration or consultation with a metabolic bariatric surgeon if available after the patient is stabilized and the leak site is identified and controlled in the initial phase of treatment.

GASTRIC SLEEVE LEAK



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GASTRIC SLEEVE LEAK

Surg Endosc (2013) 27:4232–4240
DOI 10.1007/s00464-013-3028-y



Clinical outcomes of endoscopic and surgical management for postoperative upper gastrointestinal leakage

Seohyun Lee · Ji Yong Ahn · Hwoon-Yong Jung · Jeong Hoon Lee ·
Kwi-Sook Choi · Do Hoon Kim · Kee Don Choi · Ho June Song ·
Gin Hyug Lee · Jin-Ho Kim · Beom Su Kim · Jeong Hwan Yook ·
Sung Tae Oh · Byung Sik Kim · Seungbong Han

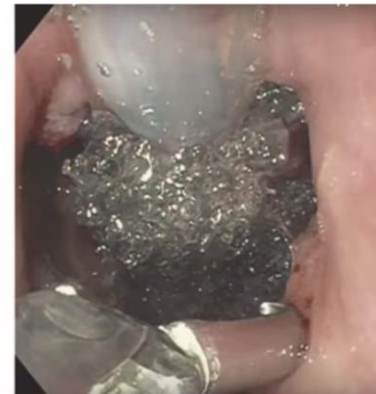
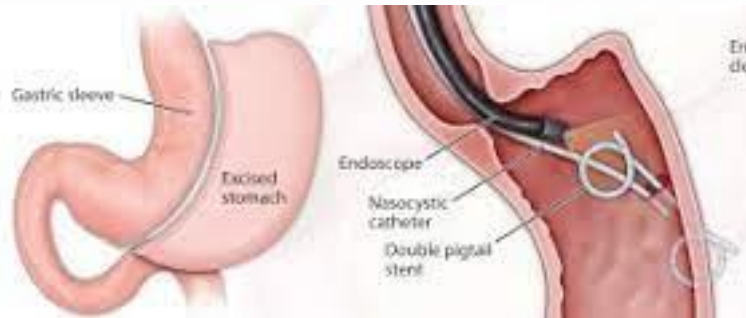




Fig. 20.3 ENDOVAC-system for the upper GI tract “to go”: (Eso-SPONGE Ready System, Braun Melsungen) with Redyrob® (mechanical wound drainage system) vs. the electric Medela® pump. With the electric pump, permanent monitoring of the suction is possible and an alarm warns of suction loss. The ready system consists of two overtures of different sizes, the “sponge” with drainage tube, the pusher to push the sponge through the overture, and a syringe with attachment to fill the drainage tube. The mechanical pump is three-stage

GASTRIC SLEEVE LEAK

Article

Is the Surgical Drainage Mandatory for Leak after Sleeve Gastrectomy?

Marius Nedelcu ^{1,2,*}, Thierry Manos ¹, Patrick Noel ^{1,3,4}, Marc Danan ¹, Viola Zulian ¹, Ramon Vilallonga ^{2,5,6} , Anamaria Nedelcu ² and Sergio Carandina ¹ 

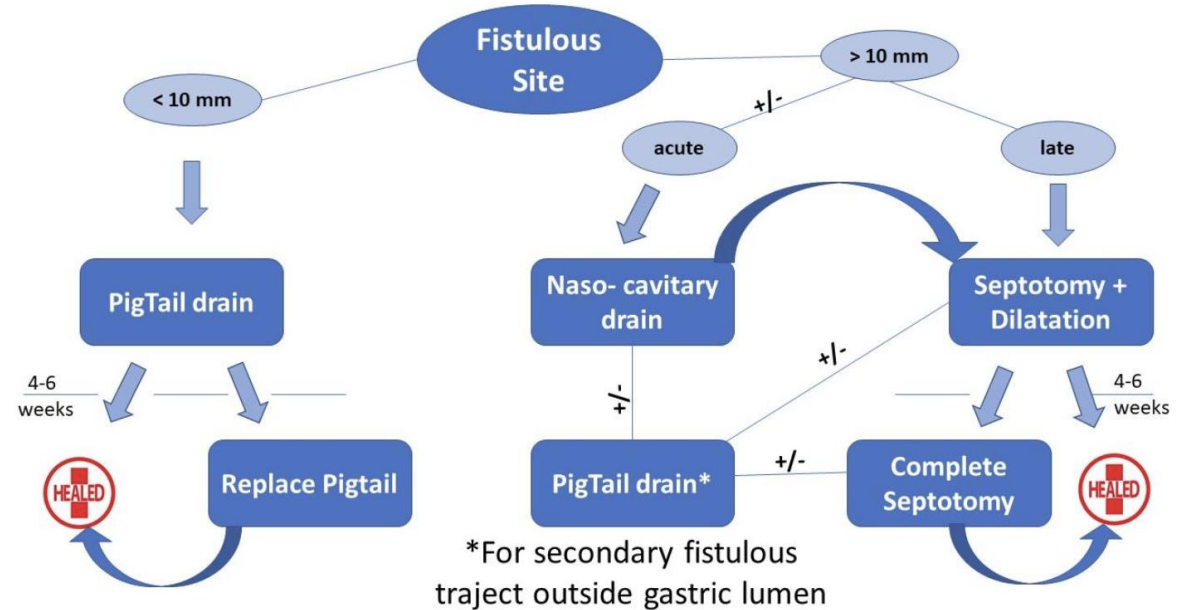
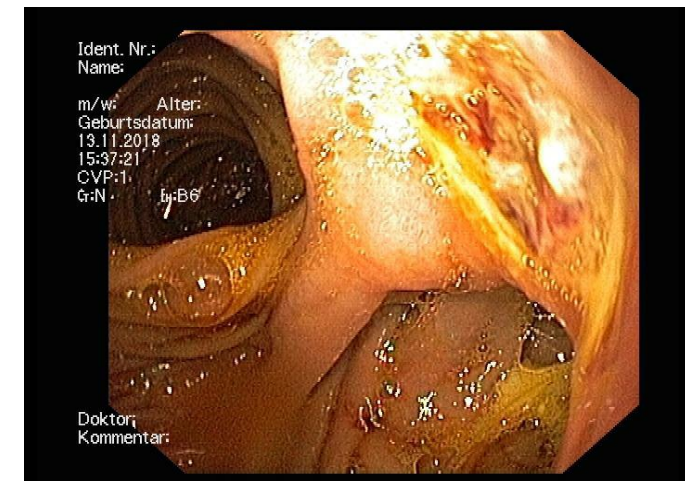


Figure 1. Algorithm of endoscopic treatment of leaks after LSG.

MARGINAL ULCER

- The need for urgent intervention for MU is uncommon in the absence of perforation or bleeding.
- A patient with perforated MU presents to the emergency room with signs and symptoms consistent with a perforated viscus, including localized or generalized sepsis. Most such patients will have a prior diagnosis of MU and a history of abdominal pain, but for some patients, perforation will be the initial presentation.
- Diagnosis can be made with an upright chest x-ray demonstrating free air, upper GI series, or CT scan.
- After resuscitation and administration of broad-spectrum antibiotics, operative repair with an omental patch, appropriate wide drainage, and consideration for a feeding/drainage tube in the excluded stomach is the preferred treatment.
- Significant upper GI bleeding due to MU can present acutely with hematemesis, melena, and/or hemorrhagic shock. Upper endoscopy can be diagnostic and therapeutic. Surgical exploration is rarely needed but may be necessary if other modalities fail.



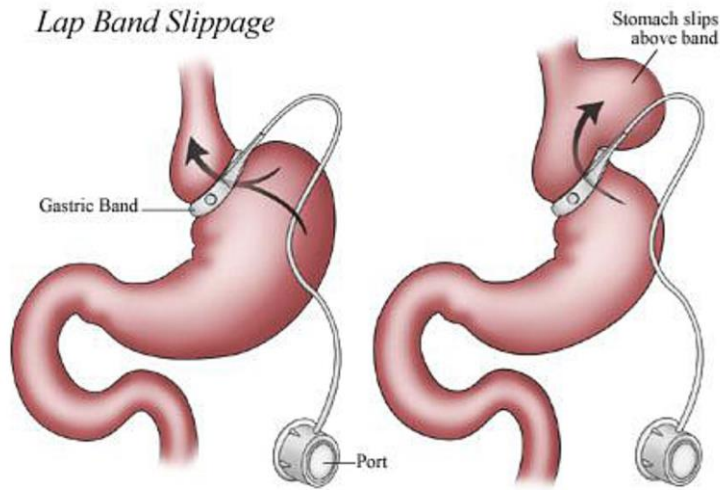
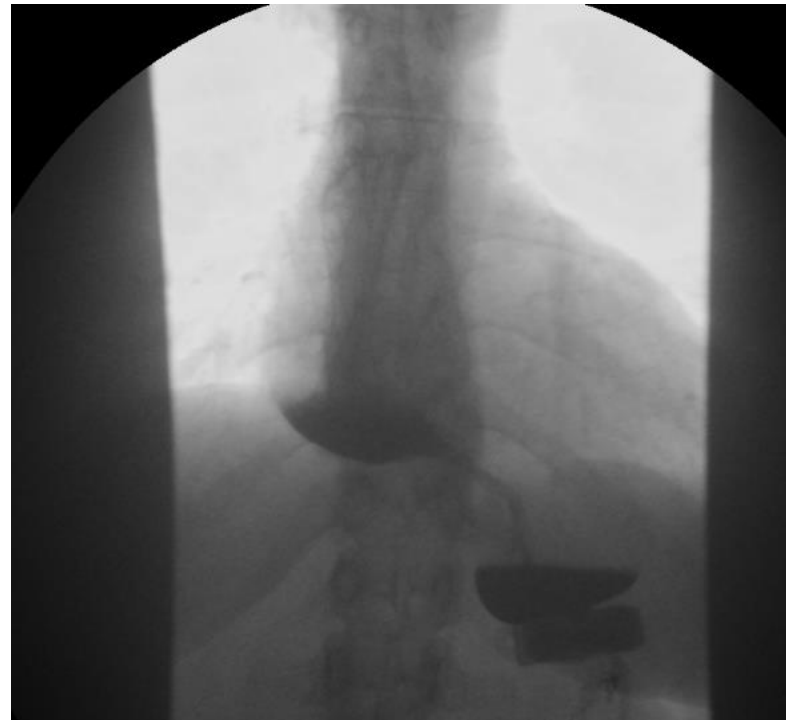


Fig. 3. Band slippage.

BENDAGGIO GASTRICO



- Initial management of band slippage includes aspiration of band fluid. If the slippage does not resolve after decompression, surgery is indicated for band removal.
- Patients with band erosion may be asymptomatic or can present with loss of restriction or weight regain, vague epigastric pain, bleeding, port-site infection, or intra-abdominal abscess. Emergent surgery is seldom needed for a band erosion. However, if a patient is unstable or has peritoneal signs, urgent band removal and drainage is required to control sepsis.

BOWEL OBSTRUCTION

Bowel obstruction

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- The most common surgical procedure for intussusception involving the JJ, with the lowest incidence of recurrence, is revision of the anastomosis.

Eur J Trauma Emerg Surg
DOI 10.1007/s00068-015-0621-x



REVIEW ARTICLE

Essential bariatric emergencies for the acute care surgeon

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Bowel obstruction due to
internal hernia

Unknown; peak incidence
7–15 months post-op

Weight loss leading to
increase in size of mesen-
teric defect

Chronic, colicky abdominal
pain, nausea, vomiting,
tachycardia

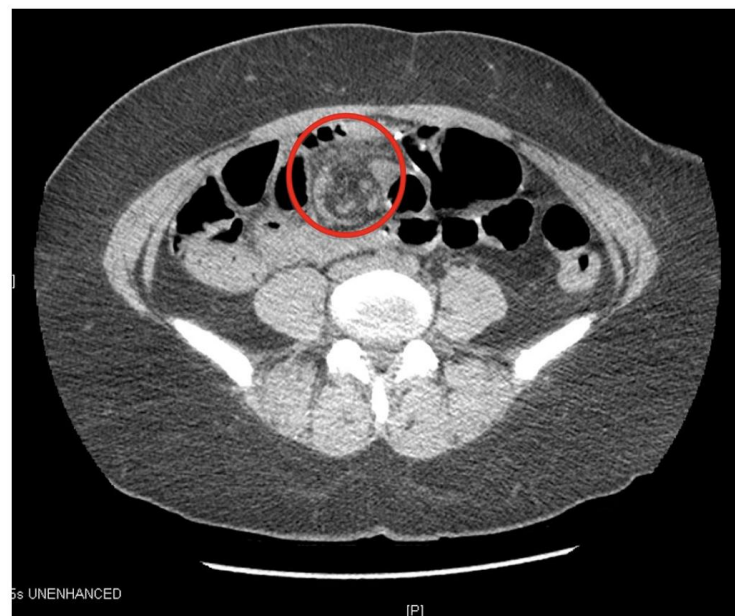
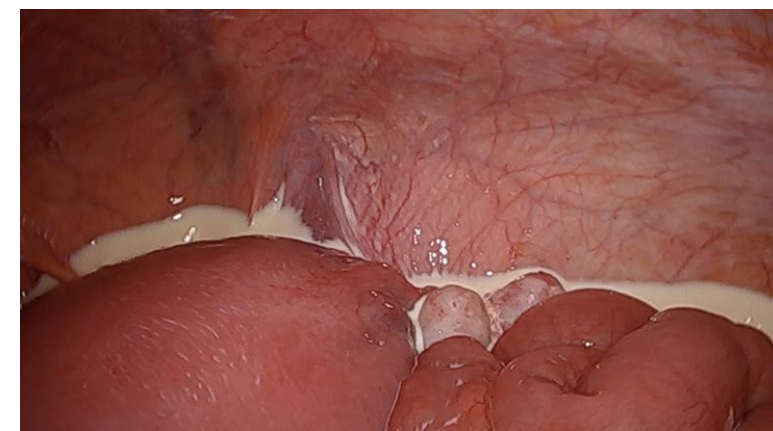
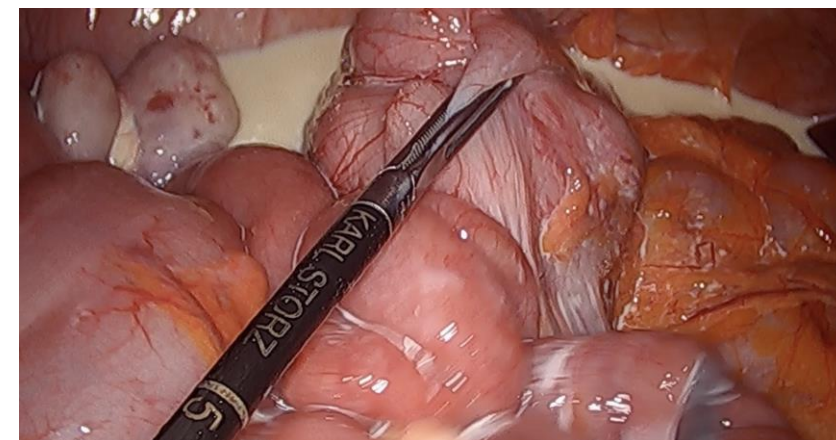
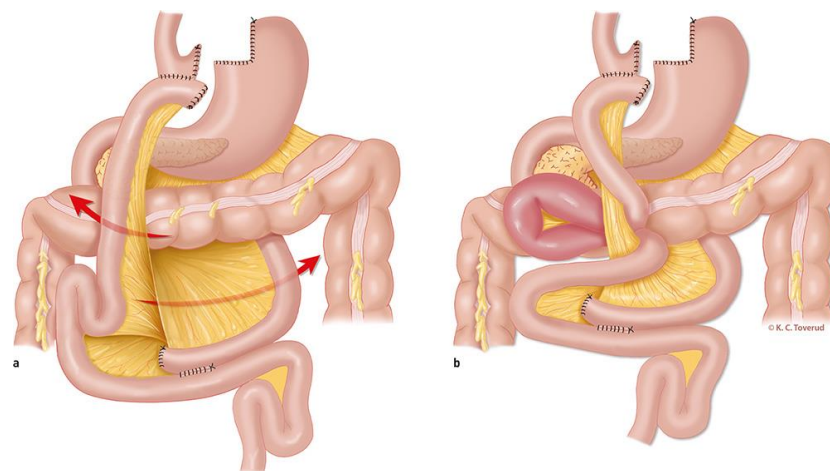
CT scan (mesenteric swirl),
surgical exploration if clini-
cally indicated

Operative exploration,
reduction of hernia and
closure of defect

INTERNAL HERNIA

ACUTE

CHRONIC



CNN

Lisa Marie Presley died of complications from prior weight-loss surgery, autopsy report shows

A report by the Los Angeles County Medical Examiner states Lisa Marie Presley's death in January was caused by a "sequelae of a small bowel..."

14.07.2023



CHOLEDOCHOLITHIASIS AFTER GASTRIC BYPASS



Surgery for Obesity and Related Diseases ■ (2019) 1–7

Review article

Systematic review of management of gallbladder disease in patients undergoing minimally invasive bariatric surgery

Adolfo Leyva-Alvizo, M.D., F.A.C.S.^a, Gabriela Arredondo-Saldaña, M.D., Valeria Leal-Isla-Flores, M.D.^a, John Romanelli, M.D., F.A.C.S.^b, Ranjan Sudan, M.D., F.A.C.S.^c, Karen E. Gibbs, M.D., F.A.C.S., F.A.S.M.B.S.^d, Anthony Petrick, M.D., F.A.C.S., F.A.S.M.B.S.^e, Ian S. Soriano, M.D., F.A.C.S., F.A.S.M.B.S.^{f,*}, for the ASMBS Foregut Com

SURGE
AND R

Based on our systematic review, the only specific recommendation for the management of patients experiencing choledocholithiasis after RYGB or BPD-DS is a timely coordinated approach between surgeon, gastroenterologist, and interventional radiologist. All of the techniques previously outlined may be effective. The available experience and patient acuity are the primary factors that should guide the approach to treatment. Transfer to a more experienced center should be considered when a center does not have the available experience or resources to deliver the most effective care for a patient with choledocholithiasis after RYGB or BPD-DS. We recommend that patients with choledocholithiasis after Lap-Band or SG undergo conventional, timely ERCP.

- laparoscopic or open common bile duct exploration
- percutaneous transhepatic instrumentation
- **transgastric ERCP**
- transenteric endoscopic CP
- ERCP with special endoscopes, including

setting

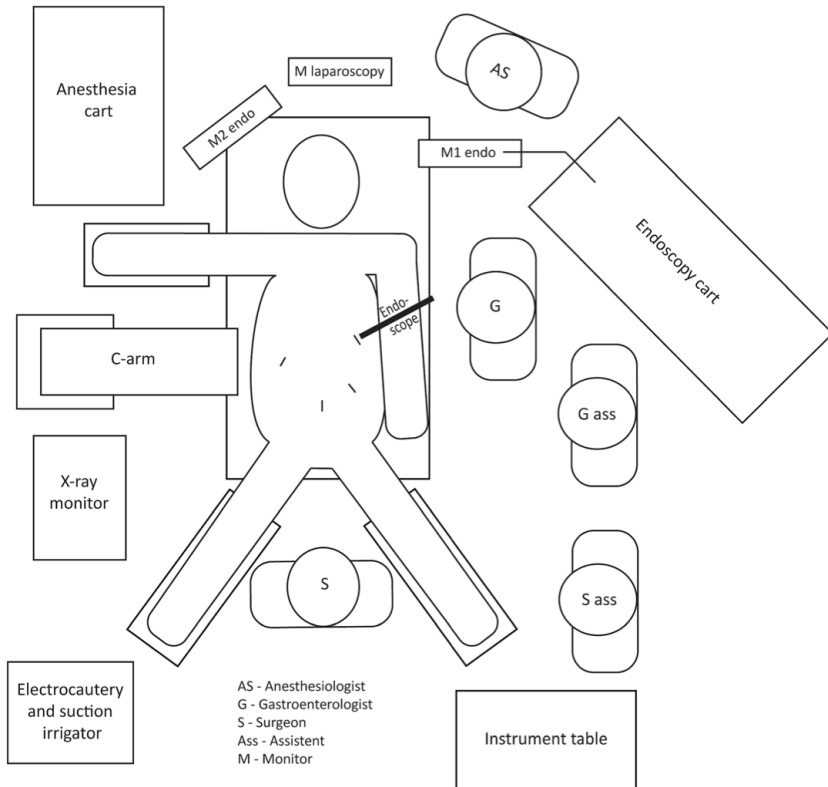
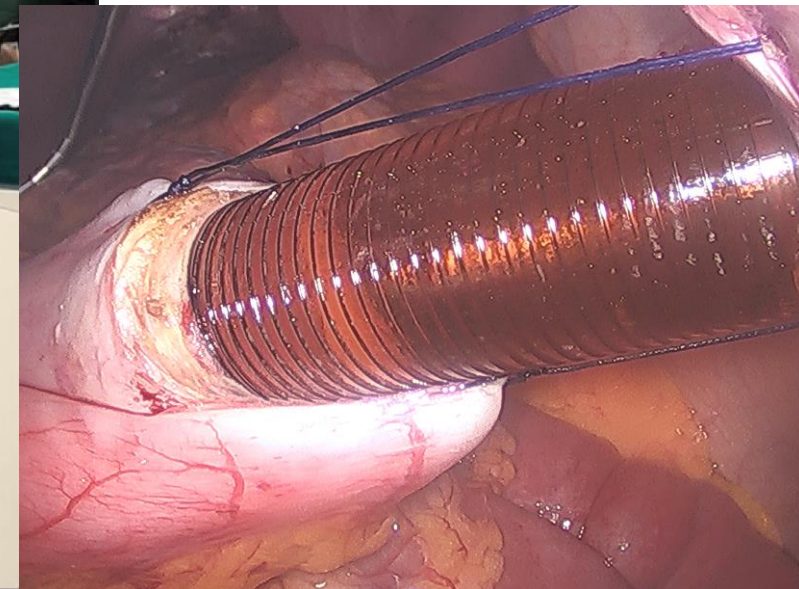
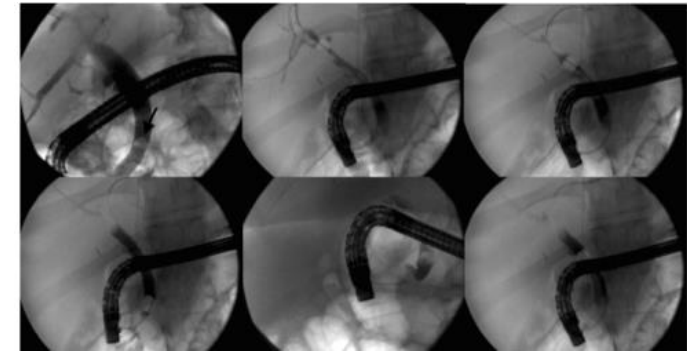


Fig. 1 Position in operation room



NUTRITIONAL DISORDERS

Clinical Nutrition 34 (2015) 335–340

Contents lists available at ScienceDirect

Clinical Nutrition

journal homepage: <http://www.elsevier.com/locate/clnu>

ELSEVIER

ESPEEN endorsed recommendation

Diagnostic criteria for malnutrition – An ESPEN Consensus Statement

T. Cederholm ^{a,*}, I. Bosaeus ^b, R. Barazzoni ^c, J. Bauer ^d, A. Van Gossum ^e, S. Klek ^f,
M. Muscaritoli ^g, I. Nyulasi ^h, J. Ockenga ⁱ, S.M. Schneider ^j, M.A.E. de van der Schueren ^{k,l},
P. Singer ^m

CrossMark

Fact box

Before malnutrition by alternative

1000%

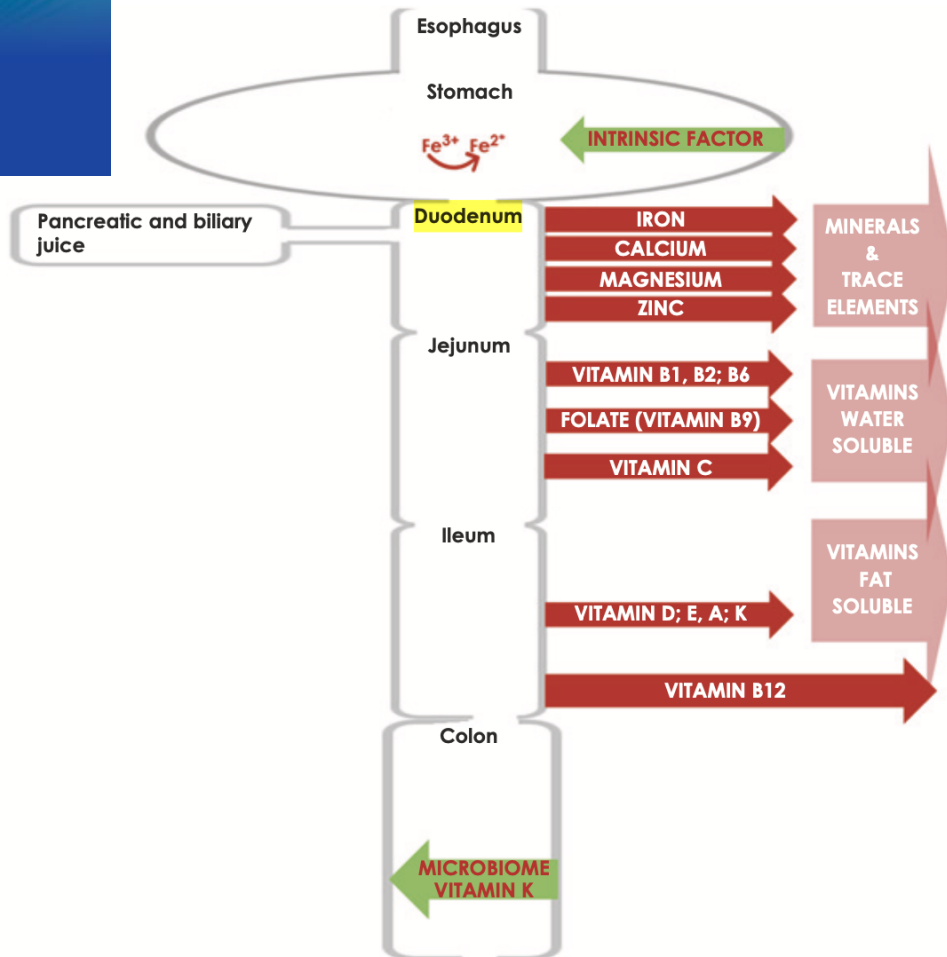
malnutrition. and it is malnutrition

- BMI < 18

Alternative 2:

- Weight loss (unintentional) > 10% indefinite of time, or >5% over the last 3 months combined with either
- BMI < 20 kg/m² if < 70 years of age, or < 22 kg/m² if ≥ 70 years of age or
- FFMI < 15 and 17 kg/m² in women and men, respectively.

NUTRITIONAL COMPLICATIONS



Malabsorption of minerals, trace elements, lipid and water soluble vitamins, calcium, magnesium, iron, intrinsic factor and vitamin B12

Protein Calorie Malnutrition

- Lower extremity edema
- Fatigue
- Excessive weight loss (< 100%)
- Hypoalbuminemia (< 2.5g/dl)
- Anemia
- Pancytopenia

Fig. 8.1 Qualitative absorption in the gastro-intestinal tract

Review article

Reversal to normal anatomy after one-anastomosis/mini gastric bypass, indications and results: a systematic review and meta-analysis

Mohammad Kermansaravi, M.D.^a, Shahab Shahabi Shahmiri, M.D., M.P.H.^b,
Amir Hossein Davarpanah Jazi, M.D.^c, Rohollah Valizadeh, Ph.D.^d,
Rudolf A. Weiner, M.D.^e, Sonja Chiappetta, M.D., Ph.D.^{f,*}

^aDepartment of Surgery, Minimally Invasive Surgery Research Center, Division of Minimally Invasive and Bariatric Surgery, Rasool-e Akram Hospital, Iran University of Medical Sciences, Tehran, Iran

^bMinimally Invasive Surgery Research Center, Iran University of Medical Sciences, Tehran, Iran

^cMinimally Invasive Surgery Research Center, Isfahan University of Medical Sciences, Isfahan, Iran

^dDepartment of Epidemiology, Student Research Committee, School of Public Health, Iran University of Medical Science, Tehran, Iran

^eDepartment of Obesity and Metabolic Surgery, Sana Klinikum Offenbach, Offenbach am Main, Germany

^fObesity and Metabolic Surgery Unit, Department of General Surgery, Ospedale Evangelico Betania, Naples, Italy

Received 19 January 2021; accepted 17 April 2021

Most investigators prepared the patients by total parental nutrition (TPN) and prescription of vitamins and minerals to reduce post-reversal complications.

**National Institute for Health and Clinical Excellence (NICE)
Guidelines for Management of Refeeding Syndrome
Patients at risk for refeeding syndrome**

ONE or more of the following:	TWO or more of the following:
BMI < 16 kg/m ²	BMI < 18.5 kg/m ²
Unintentional weight loss of > 15% in the previous 3-6 months	Unintentional weight loss of > 10% in the previous 3-6 months
Little or no nutritional intake for > 10 days	Little or no nutritional intake for > 5 das
Low levels of potassium, phosphorus or magnesium before refeeding	History of alcohol abuse or drugs including insulin, chemotherapy, anacids or diuretics



Case Report

Refeeding Syndrome: An Important Complication Following Obesity Surgery

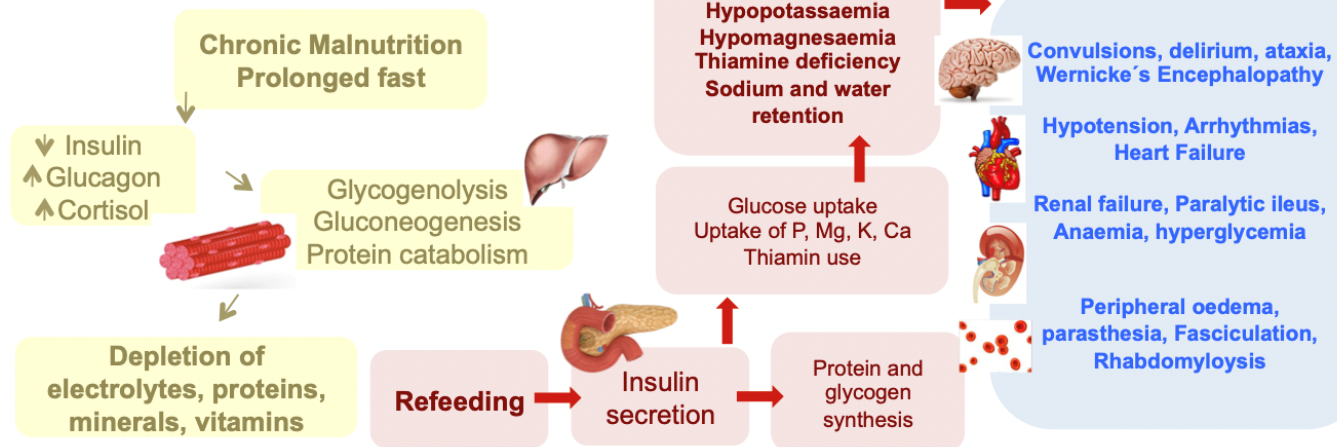
Sonja Chiappetta^a Jürgen Stein^{b, c}

^aDepartment of Obesity and Metabolic Surgery, Sana Klinikum Offenbach, Offenbach, Germany; ^bClinical Nutrition, DGD Clinics Sachsenhausen, Frankfurt/M., Germany;

^cICCC Rhein-Main, Frankfurt/M., Germany

RFS was diagnosed and managed according to the NICE guidelines [5] with appropriate **fluid balance** and **micronutrient replacement** aimed at the **correction of potassium, phosphate, calcium and magnesium**, with intravenous supplementation of 18mmol phosphate over 12 hours. After 14 days, phosphate levels had returned to normal range and respiratory and neurological symptoms were improved.

Pathophysiology of RFS



Conclusion

Obese patients with extreme weight loss following obesity surgery associated with undernutrition are at high risk for evolving RFS.

Obesity centers should:

- identify patients at risk
- perform a regular follow – up, constant supplementation and regular monitoring of micronutrient concentrations
- perform an early intervention when weight loss is excessive

Remember:

- specific additional risk factors for the development of RFS: **dysphagia, vomiting and protracted diarrhoea**
- a **chronic thiamine deficiency** can aggravate the risk of evolving RFS



Less Common Complications

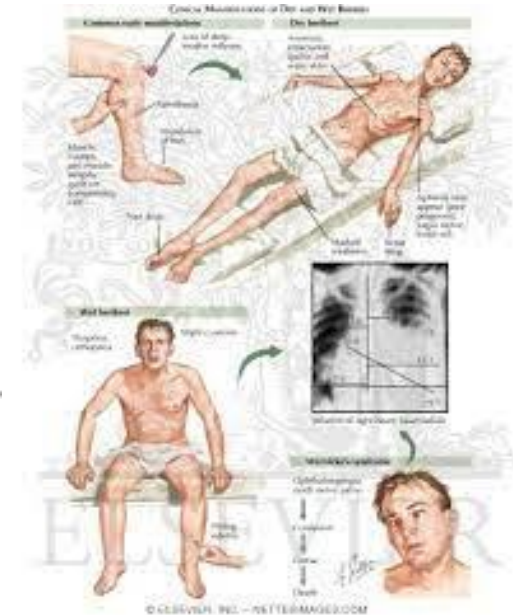
21

Sonja Chiappetta and Christine Stier

21.1 Acute Vitamin B1 Deficiency

Thiamine (vitamin B1) is absorbed throughout the small intestine.

- ▶ **Memorandum** The enteral uptake of thiamine is subject to a dose-dependent dual mechanism. Physiological amounts of thiamine below a concentration of $2 \mu\text{mol/l}$ are absorbed by an energy-dependent sodium-mediated carrier mechanism; above a concentration of $2 \mu\text{mol/l}$ vitamin B1 is absorbed by passive diffusion.



Interdisciplinary Long-Term Treatment of Bariatric and Metabolic Surgery Patients

Christine Stier
Sonja Chiappetta
Editors

 Springer

- Vomito
- Rifiuto della carne
- Atassia
- Letargia
- Ritardo mentale
- Disorientamento



Less Common Complications

21

Sonja Chiappetta and Christine Stier

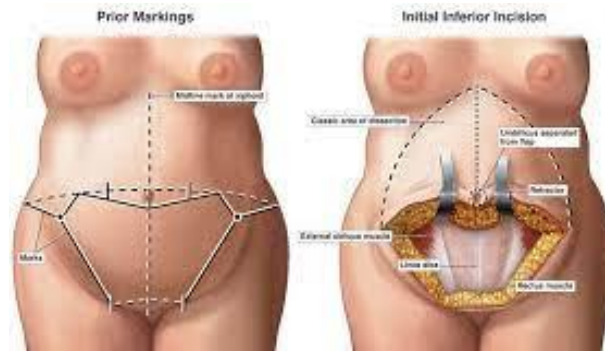
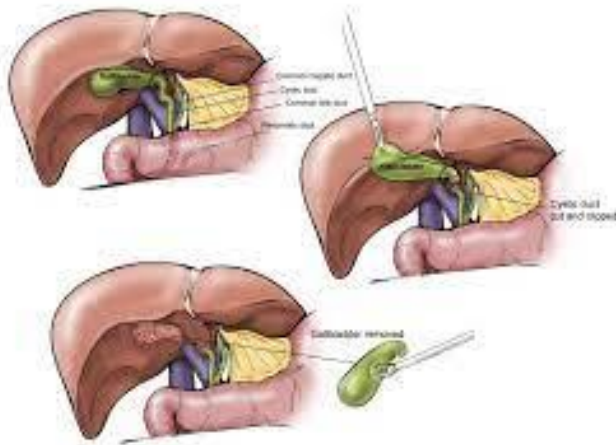
21.3 Hyperammonemia

The non-hepatic hyperammonemic encephalopathy (NHAE) after gastric bypass surgery is a widely underestimated rarity. Basically, hyperammonemia (elevated ammonia levels) is associated with severe liver disease in up to 90% of cases, but nonhepatic causes should also be considered, especially after bariatric and metabolic surgery, and particularly after gastric bypass surgery (Acharya 2016; Singh 2015; Kromas 2015; Hu 2007; Nagarur 2017; Fenves 2015).

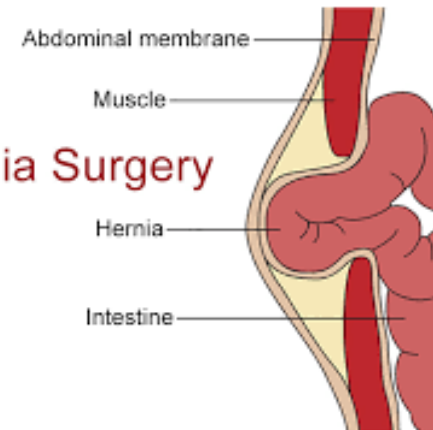
Hyperammonemia is a serious condition and often fatal if not diagnosed and treated aggressively. Raising awareness of the condition of NHAE can lead to an earlier diagnosis and the initiation of sometimes life-saving treatment.

- ▶ **Memorandum** Nonhepatic hyperammonemia is a mostly unrecognized and potentially life-threatening complication that can occur in rare cases after gastric bypass surgery. Untreated, it leads to nonhepatic hyperammonemic encephalopathy with symptoms such as seizures and coma and a frequently fatal outcome.

HIGHER RISK OF BLEEDING AND INFECTIONS



Hernia Surgery



THANK YOU!



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ORDINE PROVINCIALE DEI MEDICI CHIRURGHI E DEGLI ODONTOIATRI DI NAPOLI

Trattamento delle comorbidità metaboliche nel paziente affetto da obesità patologica

19/OTTOBRE/2023

Ore 8:30 Registrazione partecipanti

Ore 9:00 Saluto del Presidente OMCeO di Napoli dr. Bruno Zuccarelli
Introduzione al corso dott. Vincenzo Bottino, dott. Ernesto Claar

Ore 9:30 Obesità e cancro – dott. Vincenzo Bottino

Ore 10:15 Obesità e steatoepatite (NASH) – dott. Ernesto Claar

Ore 11:00 Obesità e scompenso cardiaco (HFpEF) – dott. Nicolino Esposito

Ore 11:45 Obesità e sindrome delle apnee ostruttive del sonno (OSAS) –
dott. Luciano Abbruzzese

Ore 12:30 Chirurgia metabolica – dott. Sonja Chiappetta

Ore 13:15 Le nuove linee guida della Società Italiana di Chirurgia dell'Obesità (SICOB) – dott.
Salvatore Tolone

Ore 14:00 Pausa

Ore 14:15 Confronto/dibattito tra medici intervenuti e relatori: "Il trattamento delle comorbidità
metaboliche nel paziente con obesità patologica - trattamento farmacologico versus trattamento
chirurgico "

Ore 15:00 Test di fine lavori