

Older Population. Systematic review for the new ASMBS/ IFSO Guidelines

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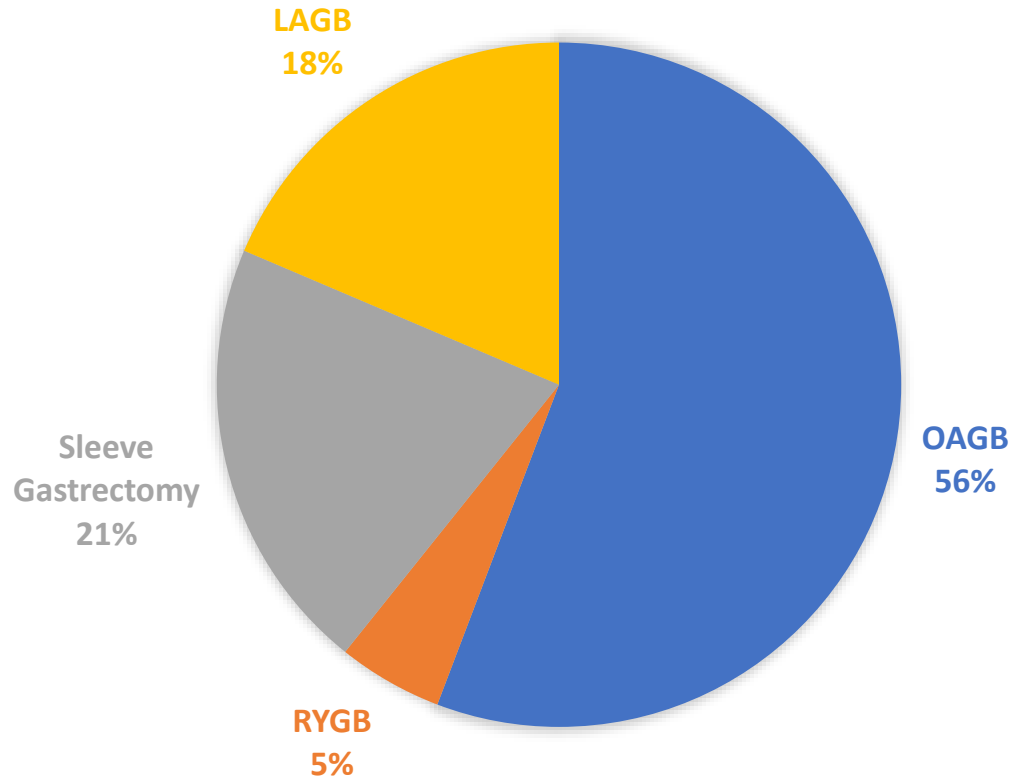
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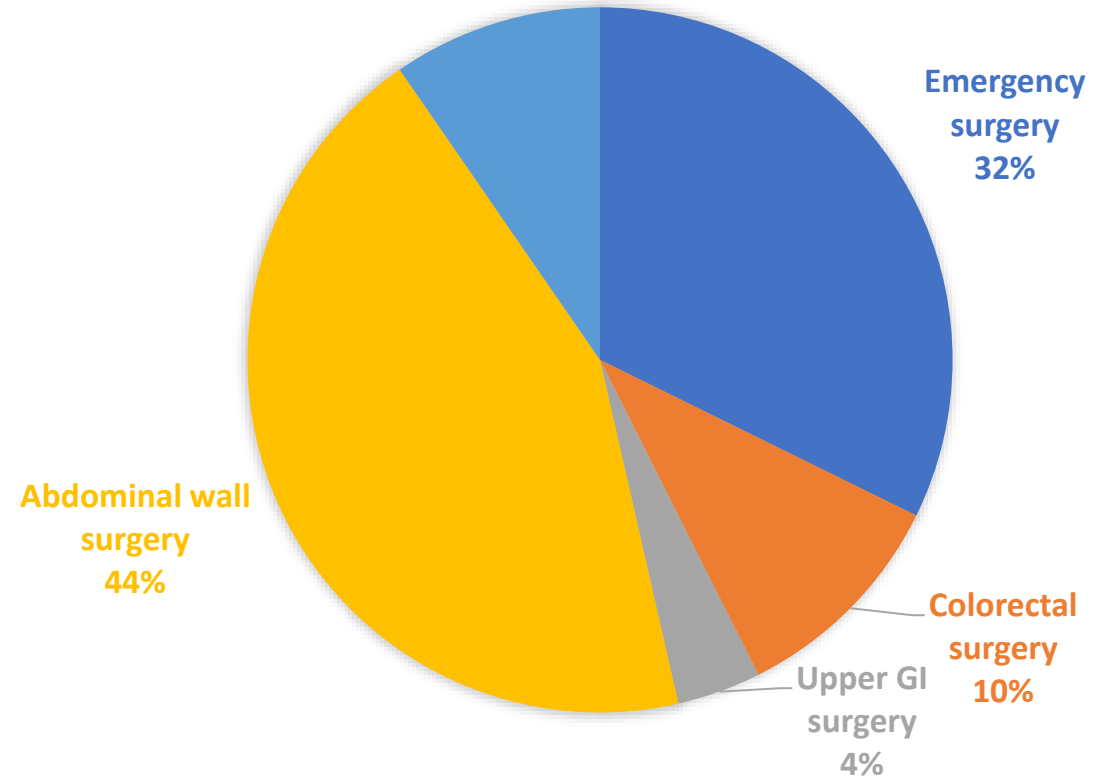


BARIATRIC PROCEDURES (242)



Cholecistectomy 10%

NON BARIATRIC PROCEDURES (>500)



ORIGINAL ARTICLE

The Impact of Age and Medicare Status on Bariatric Surgical Outcomes

Edward H. Livingston, MD; Joshua Langert, BA

Conclusions: Age, male sex, electrolyte disorders, and congestive heart failure were independent risk factors for bariatric surgical mortality. Limiting bariatric surgical procedures to those younger than 65 years is warranted because of the high morbidity and mortality associated with these operations in older patients.

Arch Surg. 2006;141:1115-1120

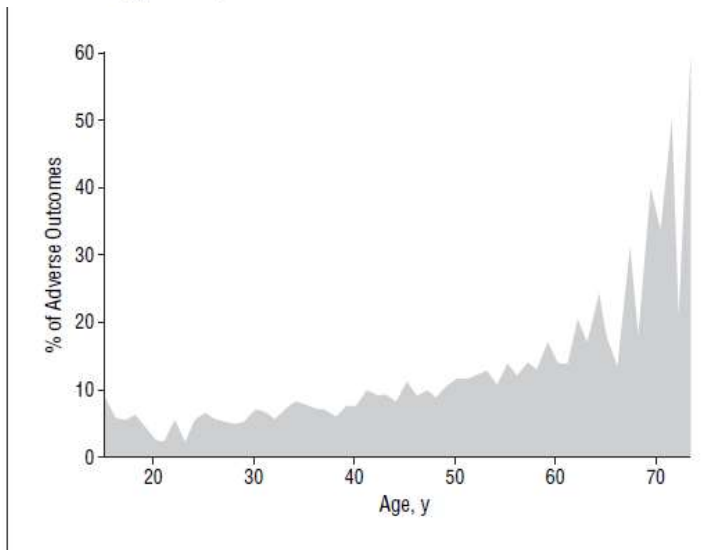


Figure. Distribution of adverse outcomes as a function of age. The ordinate represents the fraction of individuals in any age category experiencing adverse outcomes.

Clinical Interventions in Aging

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REVIEW

Bariatric surgery in elderly patients: a systematic review

This article was published in the following Dove Press journal:
 Clinical Interventions in Aging
 13 October 2015
 Number of times this article has been viewed

- There is an expected increased number of candidates for bariatric surgery in the elderly population
- Many publications that looked at the safety of bariatric surgery in elderly but data is still scarce

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Selection Criteria

There are a number of widely accepted criteria which make a patient suitable for Bariatric or weight loss surgery:

- ▶ BMI > 40 by itself or >35 if there is an associated obesity complications , such as diabetes or sleep apnoea
- ▶ Reasonable attempts at other weight loss techniques
- ▶ **Age 18-65**
- ▶ No drug dependency problems
- ▶ A capacity to understand the risks and commitment associated with the surgery.
- ▶ Pregnancy not anticipated in the first year following surgery

There is considerable flexibility in these guidelines. Patients as young as 12 have been offered surgery. Sometimes a lower BMI between 30-35 is accepted if patients have difficult to control diabetes.

NEWS & EVENTS

PREVIOUS EVENTS



The 24th World Congress of the International Federation for the Surgery of Obesity and Metabolic Disorders (IFSO)

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ENDORSED MEETINGS



Second Annual HITEC: Hopkins International Therapeutic Endoscopy Course

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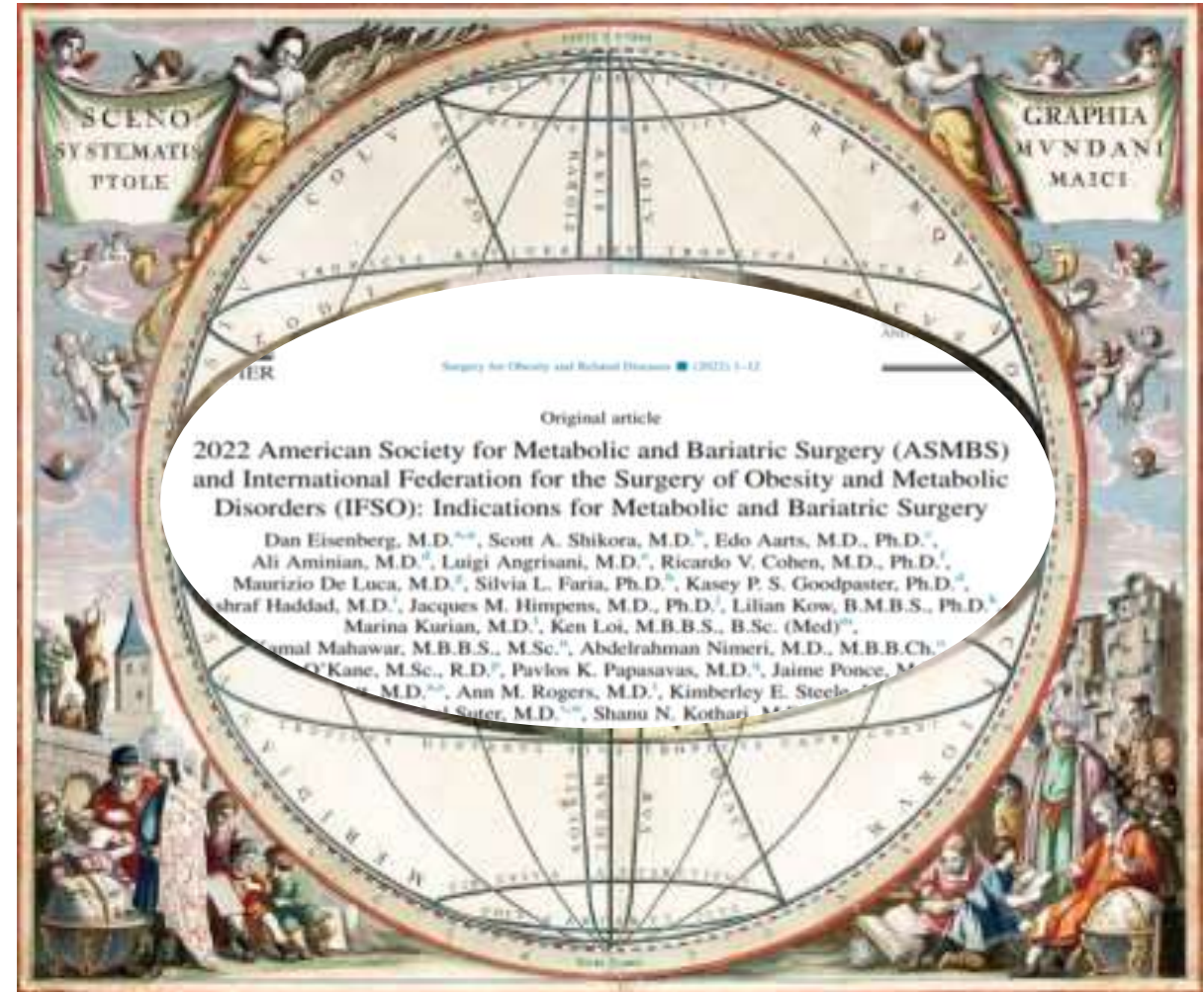
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What happened during IFSO 2022?

The Copernican revolution of the guidelines





Original article

2022 American Society for Metabolic and Bariatric Surgery (ASMBS) and International Federation for the Surgery of Obesity and Metabolic Disorders (IFSO): Indications for Metabolic and Bariatric Surgery

Dan Eisenberg, M.D.^{1,2*}, Scott A. Shikora, M.D.³, Edo Aarts, M.D., Ph.D.⁴, Ali Aminian, M.D.⁵, Luigi Angrisani, M.D.⁶, Ricardo V. Cohen, M.D., Ph.D.⁷, Maurizio De Luca, M.D.⁸, Silvia L. Faria, Ph.D.⁹, Kasey P. S. Goodpaster, Ph.D.¹⁰, Ashraf Haddad, M.D.¹¹, Jacques M. Himpens, M.D., Ph.D.¹², Lilian Kow, B.M.B.S., Ph.D.¹³, Marina Kurian, M.D.¹⁴, Ken Loi, M.B.B.S., B.Sc. (Med)¹⁵, Kamal Mahawar, M.B.B.S., M.Sc.¹⁶, Abdelrahman Nimeri, M.D., M.B.B.Ch.¹⁷, Mary O'Kane, M.Sc., R.D.¹⁸, Pavlos K. Pappasavas, M.D.¹⁹, Jaime Ponce, M.D.²⁰, Janey S. A. Pratt, M.D.²¹, Ann M. Rogers, M.D.²², Kimberley E. Steele, M.D., Ph.D.²³, Michel Suter, M.D.²⁴, Shamu N. Kothari, M.D.²⁵

Extremes of age

Older population

Coincident with the demonstrated safety of MBS, surgery has been performed successfully in increasingly older patients over the past few decades, including individuals >70 years of age [45,46]. In septuagenarians MBS is associated with slightly higher rates of postoperative complications compared with a younger population, but still provides substantial benefits of weight loss and remission of comorbid disease [46]. In fact, the presence of obesity comorbid disease and the choice of operation are more predictive of 30-day adverse outcomes than age alone [47]. Similar to other operations, the question of whether there should be an upper chronologic age limit is complex. The physiologic changes that occur with aging may have an impact on the efficacy of MBS, the incidence of postoperative complications, and the ability of older patients to recover from surgery. However, it appears that factors other than age, such as frailty, cognitive capacity, smoking status, and end-organ function have an important role [48]

Frailty, rather than age alone, is independently associated with higher rates of postoperative complications following MBS [49]. Furthermore, when considering MBS in older patients, the risk of surgery should be evaluated against the morbidity risk of obesity-related diseases. Thus, there is no evidence to support an age limit on patients seeking MBS, but careful selection that includes assessment of frailty is recommended.

- [45] Al-Kurd A, Grinbaum R, Mordechay-Heyn T, et al. Outcomes of sleeve gastrectomy in septuagenarians. *Obes Surg* 2018;28(12):3895–901.
- [46] Smith ME, Bacal D, Bonham AJ, et al. Perioperative and 1-year outcomes of bariatric surgery in septuagenarians: implications for patient selection. *Surg Obes Relat Dis* 2019;15(10):1805–11.
- [47] Edwards MA, Mazzei M, Agarwal S, Rhodes L, Bruff A. Exploring perioperative outcomes in metabolic and bariatric surgery amongst the elderly: an analysis of the 2015–2017 MBSAQIP database. *Surg Obes Relat Dis* 2021;17(6):1096–106.
- [48] Watt J, Tricco AC, Talbot-Hamon C, et al. Identifying older adults at risk of harm following elective surgery: a systematic review and meta-analysis. *BMC Med* 2018;16(1):2.
- [49] Gondal AB, Hsu CH, Zeeshan M, Hamidi M, Joseph B, Ghaderi I. A frailty index and the impact of frailty on postoperative outcomes in older patients after bariatric surgery. *Surg Obes Relat Dis* 2019;15(9):1582–8.

There is no upper patient-age limit to MBS. Older individuals who could benefit from MBS should be considered for surgery after careful assessment of co-morbidities and frailty. Carefully selected individuals considered higher risk for general surgery may benefit from MBS.

TWO INTERNATIONAL TEAMS TO METHODOLOGICALLY SUPPORT NEW IFSO/ASMBS INDICATIONS

- TEAM ONE: SYSTEMATIC REVIEW OF LITERATURE ACCORDING TO **PRISMA STATEMENT AND PICO METHODOLOGY**
- TEAM TWO: **DELPHI** CONSENSUS TO RESOLVE ISSUES NOT RESOLVED BY SYS REV



EXCLUSION CRITERIA

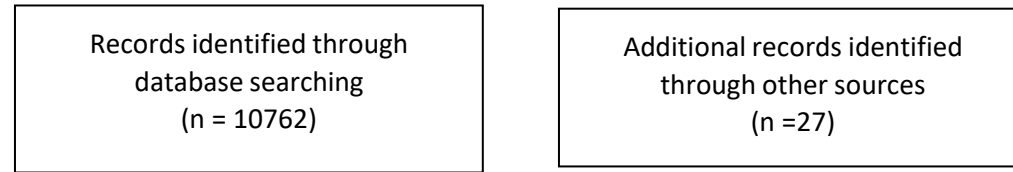
- a) Paper not in English language
- b) Not available full text
- c) Letter to the Editor
- d) Follow up less than 12 months
- e) Number of patients less than 15
- f) Descriptive article
- g) Articles before year 2000

Question: Older population		
PATIENT	Patients which undergone bariatric surgery	Elderly
INTERVENTION	Age>65 / ELDERLY	Bariatric surgery
COMPARISON	NON- ELDERLY – YOUNG	Lifestyle change/medical therapy
OUTCOME	WEIGHT LOSS - COMPLICATION – COMORBIDITIES RESOLUTION	

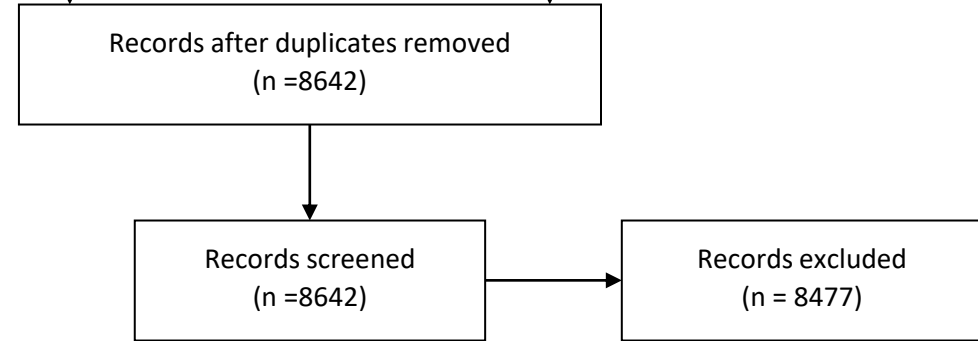
P		I		C		O
AGE >65	AND	Bariatric surgery	AND	Lifestyle change	AND	Weight loss
OR		OR		OR		OR
OLDER		Metabolic surgery		Medical therapy		Complications
OR		OR				OR
ELDERLY		Sleeve				Comorbidities resolution
OR		OR				
Veteran	Bypass					

P		I		C		O
Bariatric surgery	AND	AGE >65	AND	Age <65	AND	Weight loss
OR		OR		OR		OR
Metabolic surgery		OLDER		Young		Complications
OR		OR				OR
Sleeve		ELDERLY				Comorbidities resolution
OR		OR				
Bypass	Veteran					
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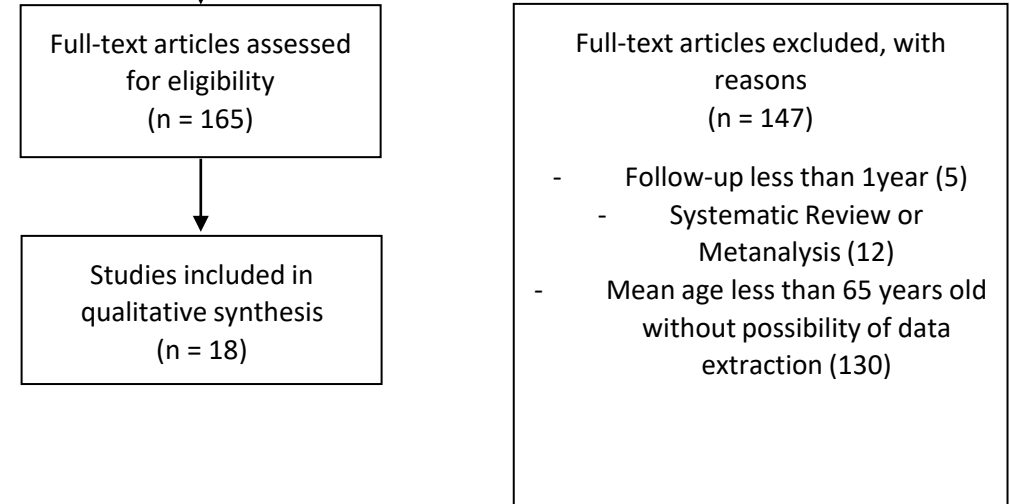
Identification



Screening



Eligibility



Included

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QUALITY OF EVIDENCE RETRIEVED

Study type	N°		Mean Follow-up
RCT	1	MBS VS Lifestyle change	26.15 months
Prospective comparative	1	4 PAPERS: AGE>65 VS	
Retrospective comparative	7	AGE<65 4 PAPERS: DIFFERENT BARIATRIC PROCEDURES IN ELDERLY PTS	
Retrospective non-comparative	9		

Grade of Recommendation	Level of Evidence	Type of Study
A	1a	Systematic review of (homogeneous) randomized controlled trials
A	1b	Individual randomized controlled trials (with narrow confidence intervals)
B	2a	Systematic review of (homogeneous) cohort studies of "exposed" and "unexposed" subjects
B	2b	Individual cohort study / low-quality randomized control studies
B	3a	Systematic review of (homogeneous) case-control studies
B	3b	Individual case-control studies
C	4	Case series, low-quality cohort or case-control studies
D	5	Expert opinions based on non-systematic reviews of results or mechanistic studies

JADAD SCORE >3

MINOR SCORE >7 / 9 RESPECTIVELY FOR NON RCT
NONCOMPARATIVE AND COMPARATIVE STUDIES

Evidence-Based Medicine, Stony Brook University Libraries, 14 March 2023

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MEAN RESULTS

	Age >65y	Age <65y	Lifestyle change/med therapy
N°	1848	2442	273
Mean Age (years)	69.17	53.38	68.44
Mean BMI	44.5	43.82	41.2
Post-operative mortality	2	0	0
Peri operative complication rate	25%	7%	0%
Mean EWL%	55.56	57.64	21.35%
Comorbidities resolutions	67%	74%	36%

WARNING BEFORE YOU READ

THOSE DATA DOES NOT REPRESENT A META ANALISYS AND THERE WERE THE RESULTS OF NON HOMOGEOUS DATA EVALUTATION

According to our literature review we could agree with IFSO/ASMBS Guideline 2022 with a recommendation grade B

There is no upper patient-age limit to MBS. Older individuals who could benefit from MBS should be considered for surgery after careful assessment of co-morbidities and frailty. Carefully selected individuals considered higher risk for general surgery may benefit from MBS.

We could not state which could be the best procedures in elderly, more detailed and methodologically appropriate studies must be provided.

THANKS FOR YOUR ATTENTION!

