MBS options in a patient with Class I/II Obesity & a large abdominal wall hernia

XXVI IFSO WORLD CONGRESS OF BARIATRIC & METABOLIC SURGERY

IFSO NAPOLI 2023

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CASE MIX DISCLOSURE

LAGB

SG

RYGB

Total > 6000

CONFLICT OF INTEREST DISCLOSURE

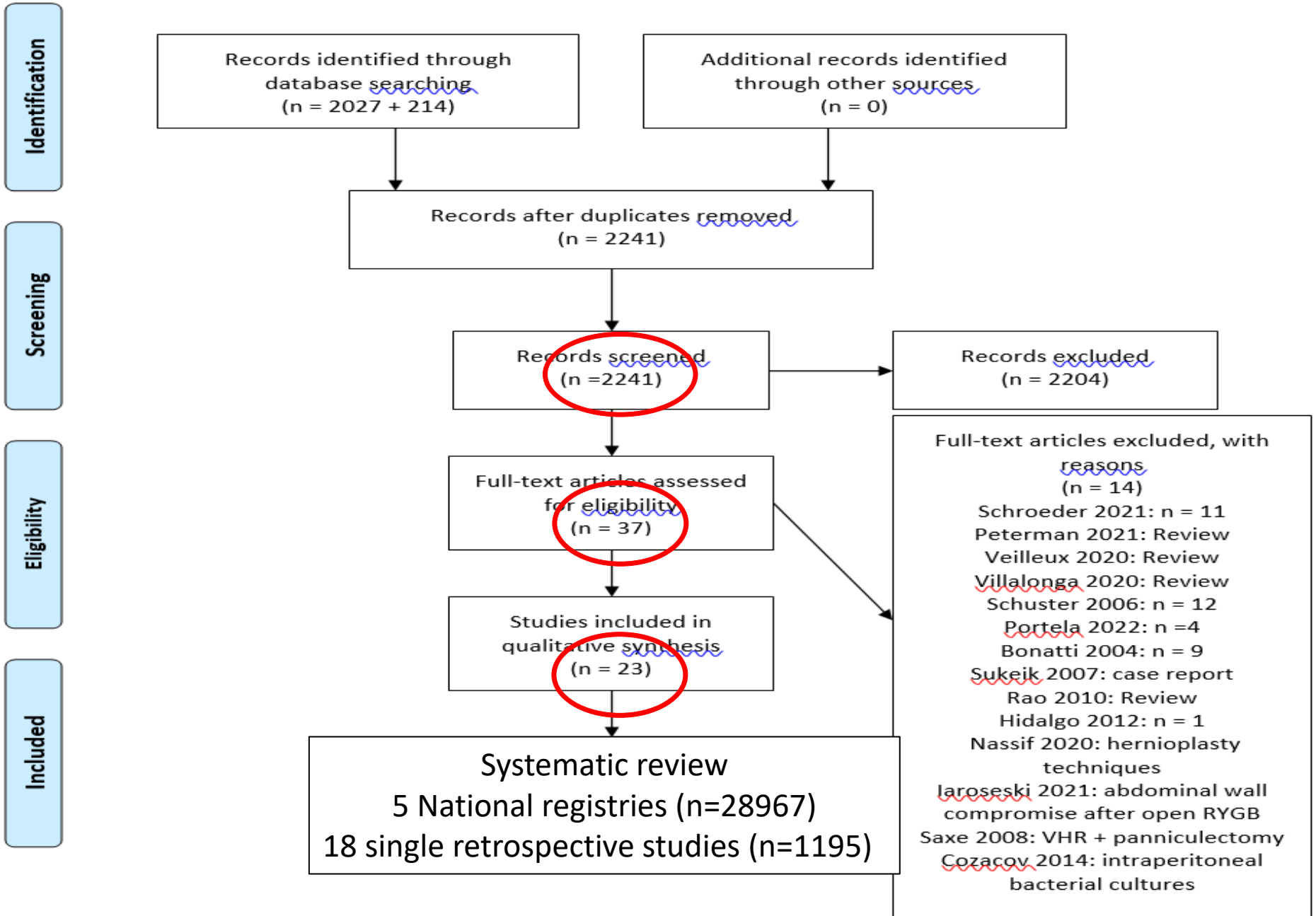
I have no potential conflict of interest to report

ASMBS/IFSO Indications for Metabolic and Bariatric Surgery – 2022

In patients with severe obesity and an abdominal wall hernia requiring elective repair, MBS should be considered first to induce significant weight loss, and consequently reduce the rate of complications associated with hernia repair and increase durability of the repair.

What is the Evidence?

PRISMA: MBS and Abdominal wall hernia repair



Overview of studies included

- Heterogenous
  - timing
    - before MBS
      - Symptomatic intestinal obstruction
    - concomitant MBS
    - staged sufficient weight loss
  - technique
    - Open
    - Laparoscopic
    - +/- mesh
      - Epigastric
      - Umbilical
      - Paraumbilical
      - Spigelian
  - ventral hernia
    - Primary
    - Recurrent
  - MBS
    - LAGB
    - LSG
    - RYGB – open/lap

Laparoscopic Ventral Hernia Repair in Bariatric Patients: the Role of Defect Size and Deferred Repair

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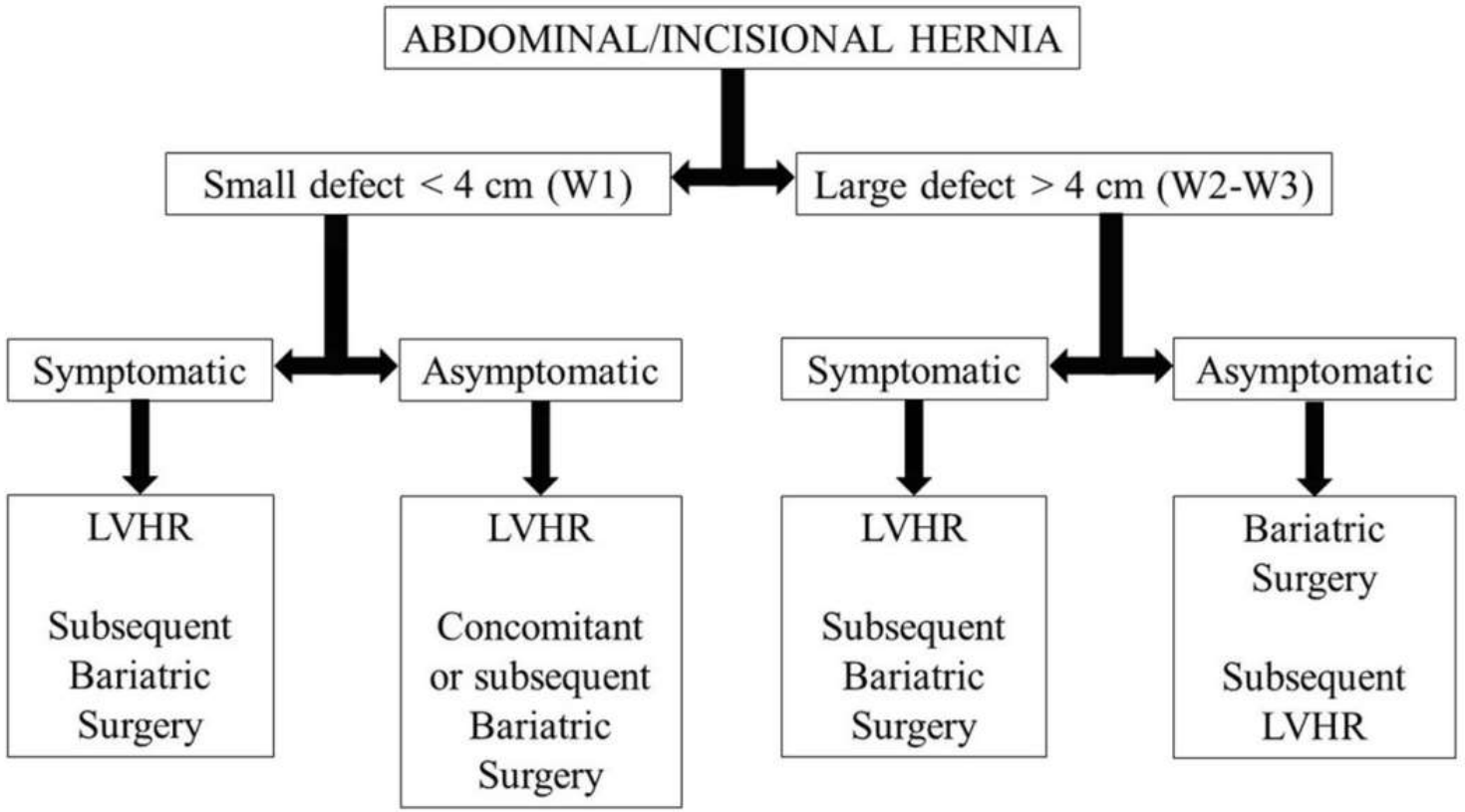

EHS:
W2 4–10 cm; W3 > 10cm

Obesity Surgery (2020) 30:3905–3911

Overview of studies included

6 studies compared the timing of VHR

- MBS with and without concurrent VHR (n = 4690 concomitant versus n = 4648 non-concomitant VHR)
- VHR before (n = 30) and after BMS (n = 170)
- VHR before (n = 60), concomitant VHR (n = 14) and after BMS (n = 16)
- VHR in the 2 years before (n = 2039), concomitant VHR (n = 3388) and delayed VHR within 2 years after BMS (n = 6260)
- bariatric surgery only (n = 988) versus BMS with concomitant VHR (n = 988)
- concomitant VHR (n = 20) versus VHR after BMS (n=20)

Overview of studies included

- LOS – heterogenous
  - ↓LOS VHR before MBS - 2 +/- 2.7 vs 2.8 +/- 1.9 (p < 0.5) Ohmi et al
  - ↓LOS VHR after MBS - 10.7 +/- 9.3 vs 6.2 +/- 2.6 (p = 0.002) Chandeze et al
  - ↓LOS concomitant VHR - BMS first 12.1+/- 14.5 days Moszkowicz et al
    - VHR first 9.3 +/- 8 and
    - concomitant 7.6+/- 8.2 (p < 0.001)

Olmi S, et al. Obes Surg. 2020;30(10):3905-11
Chandeze et al Surg Obes Relat Dis. 2019;15(1):83-8
Moszkowicz et al Obes Surg. 2021;31(12):5251-9

Overview of studies included

- Morbidity – haematoma, seroma, SSI most common
  - 37.5% SBO when deferred Eid et al
  - 4.6% SSI concomitant VHR
  - MBS + VHR vs MBS: ↑ incidence complications 5.8 vs 3.8% (p < 0.001)
    - ↑ reoperation rate 2.3% vs 1.1% (p < 0.001)
    - ↑ return OR 30 days 3.3% vs 0.6% (p < 0.01)
    - ↑ readmission rate 3.2% vs 5.9% (p = 0.01) (Khorgami et al)
  - Seroma VHR obese (13.3%) > VHR after MBS (5.9%) Olmi et al
  - Infections MBS +VHR > VHR obesity Chandeze et al
    - sepsis (0.3% vs 0.1%. P<0.004%) Moolla et al
    - SSI (0.7 vs 0.3%, p = 0.025)

Eid et al Surg Endosc. 2004;18(2):207-10
Olmi S, et al. Obes Surg. 2020;30(10):3905-11
Khorgami et al Surg Obes Relat Dis. 2017;13(6):997-1002
Chandeze et al Surg Obes Relat Dis. 2019;15(1):83-8
Moola et al J Gastrointest Surg. 2020;24(1):58-66.

Overview of studies included

5 national register studies (n=28,967)

- Mortality
  - Not significant in 4 register studies VHR vs VHR + MBS

- VHR + MBS
  - ↑ SSI
  - ↑complications
  - ↑30D morbidity
  - ↑recurrence

Clapp et al Obes Surg. 2020;30(11):4474-81
Khorgami et al Surg Obes Relat Dis. 2017;13(6):997-1002
Moolla et al Gastrointest Surg. 2020;24(1):58-66
Spaniolas et al Obes Surg. 2015;25(10):1864-8
Moszkowicz et al Obes Surg. 2021;31(12):5251-9

Recommendation

- Obesity is a risk factor for the development of ventral hernia .
- Evidence suggests that patients with abdominal wall hernia, may benefit from significant weight loss before hernia repair.
- In patients with severe obesity and abdominal wall hernia, MBS-induced weight loss should be recommended before ventral hernia repair in order to reduce rate of postoperative complications

Level of Evidence 2b

Grade of recommendation B

Individual cohort study / low-quality randomized control studies

Recommendation

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

IFSO

Melbourne 2024

September 3rd – 6th