

Operating on Patients with Morbid Obesity – Challenges & Considerations

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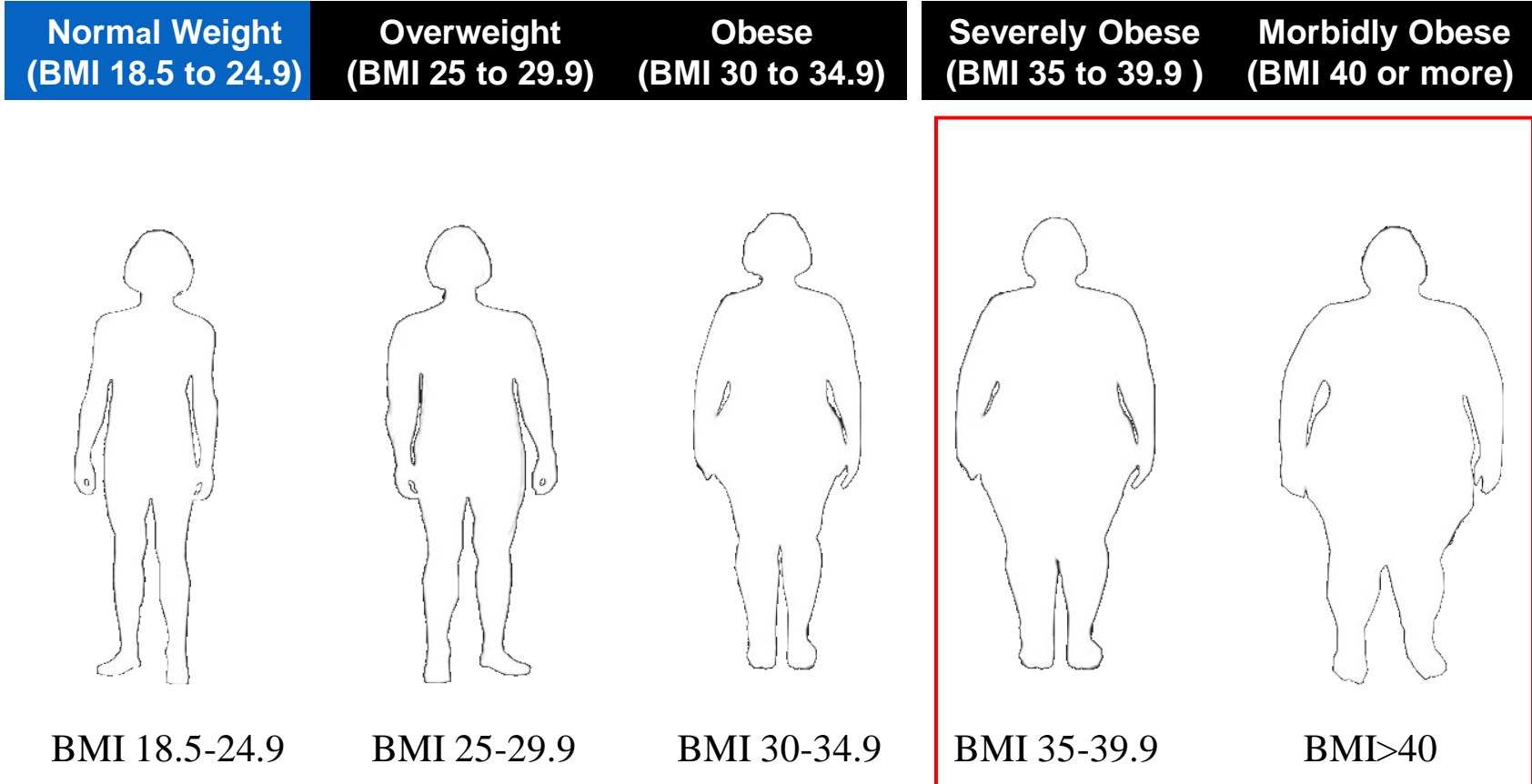
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Objectives

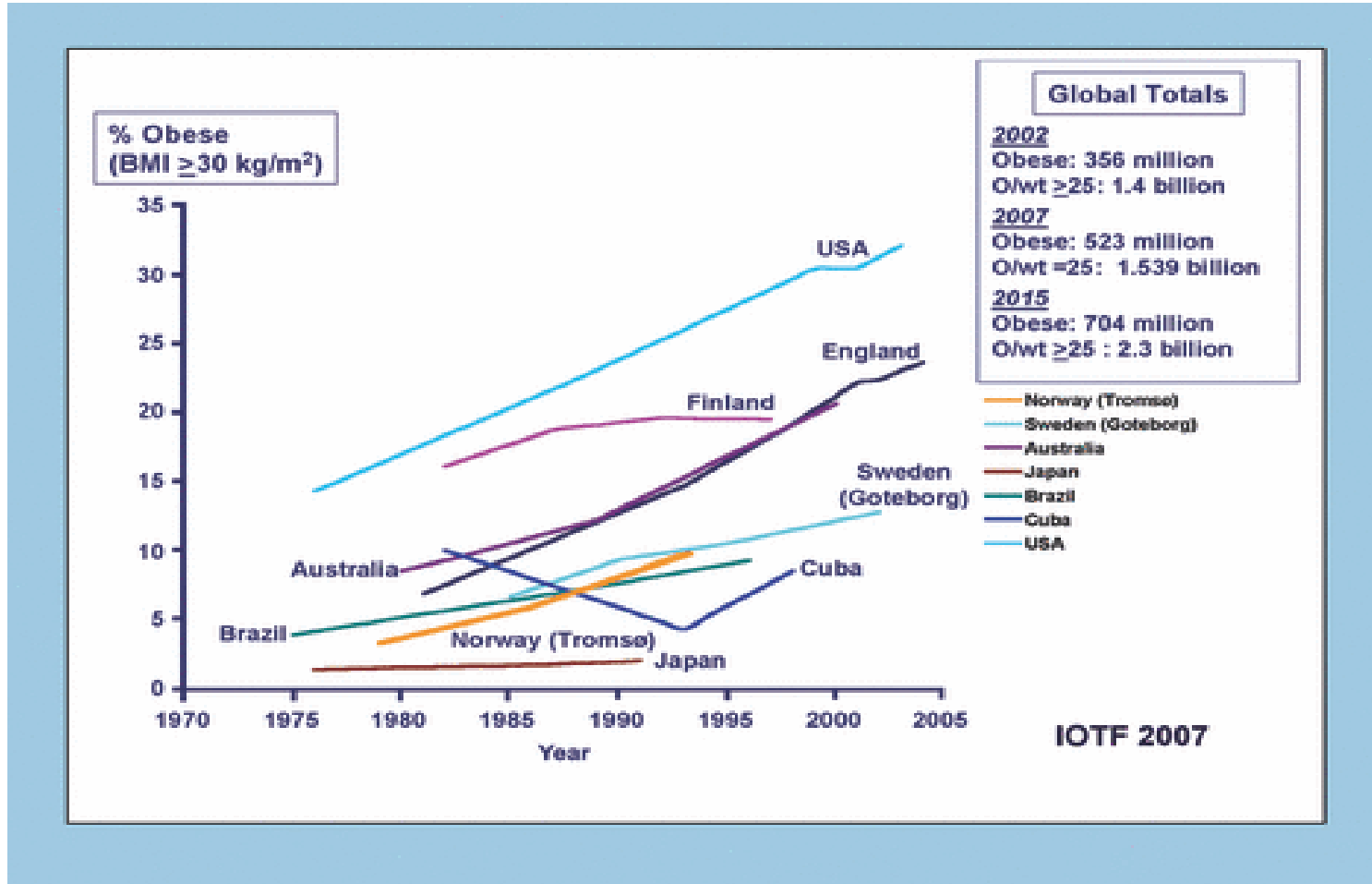
- The scale of the problem
- Bariatric surgery as a model of operating on patients with morbid obesity
- Preoperative considerations
- Intra-operative considerations
- Postoperative considerations



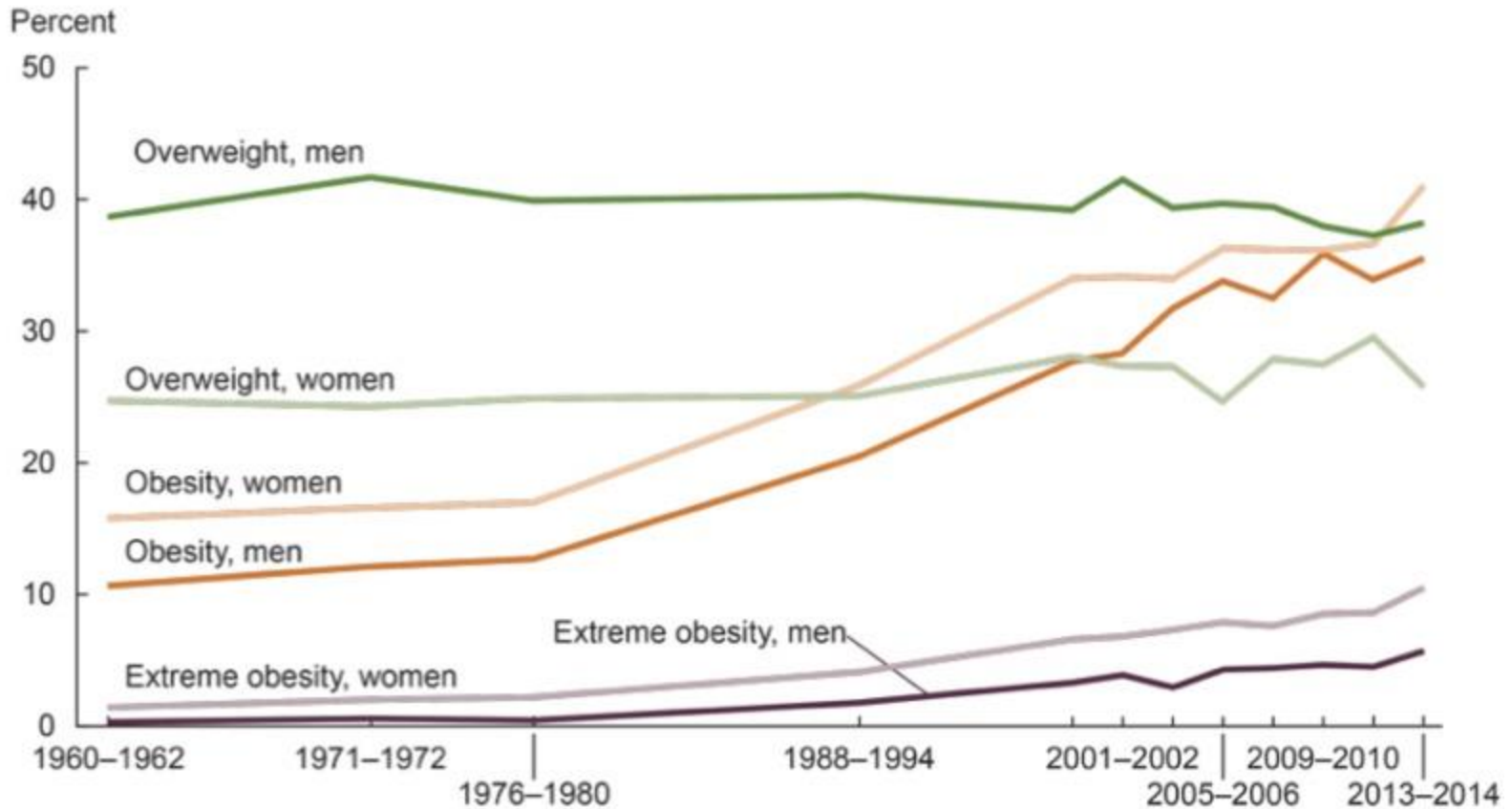
Definition



Scale of problem



Scale of problem



NOTES: Age-adjusted by the direct method to the year 2000 U.S. Census Bureau estimates using age groups 20–39, 40–59, and 60–74. Overweight is body mass index (BMI) of 25 kg/m² or greater but less than 30 kg/m²; obesity is BMI greater than or equal to 30; and extreme obesity is BMI greater than or equal to 40. Pregnant females were excluded from the analysis.

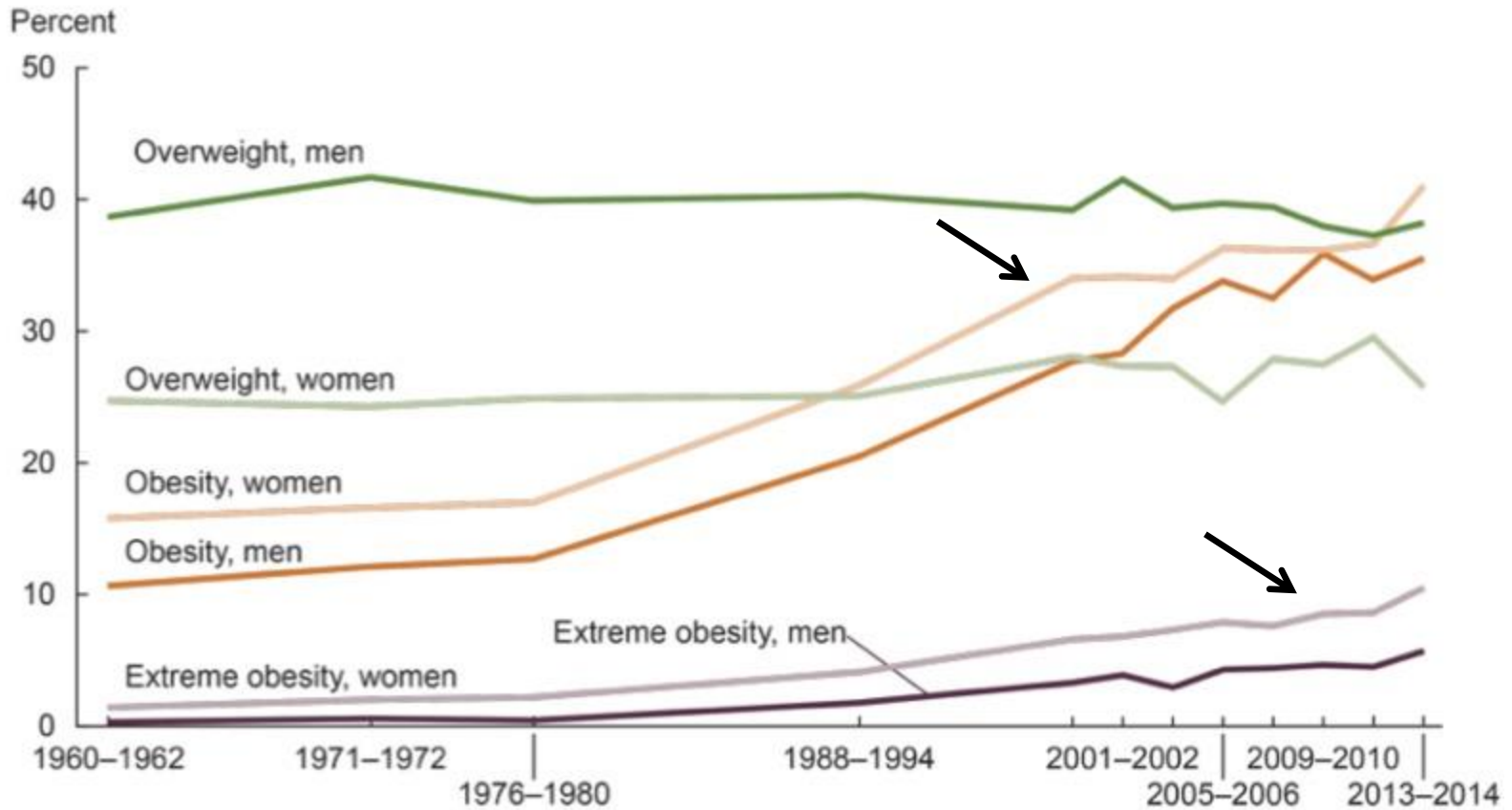
SOURCES: NCHS, National Health Examination Survey and National Health and Nutrition Examination Surveys.



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Scale of problem



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Scale of problem

Public Health England

Healthmatters **Scale of the problem**



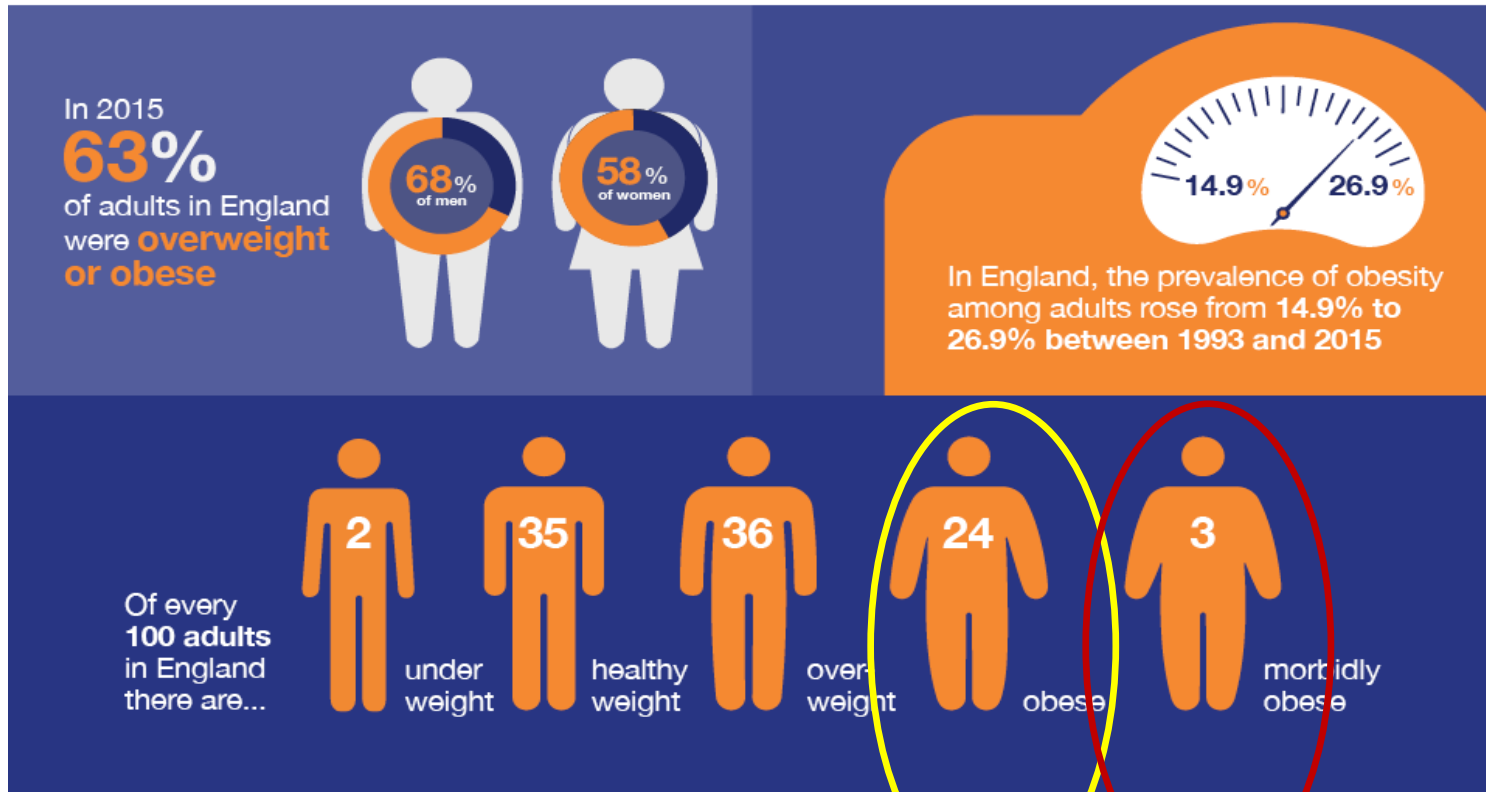
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Scale of problem

Public Health England

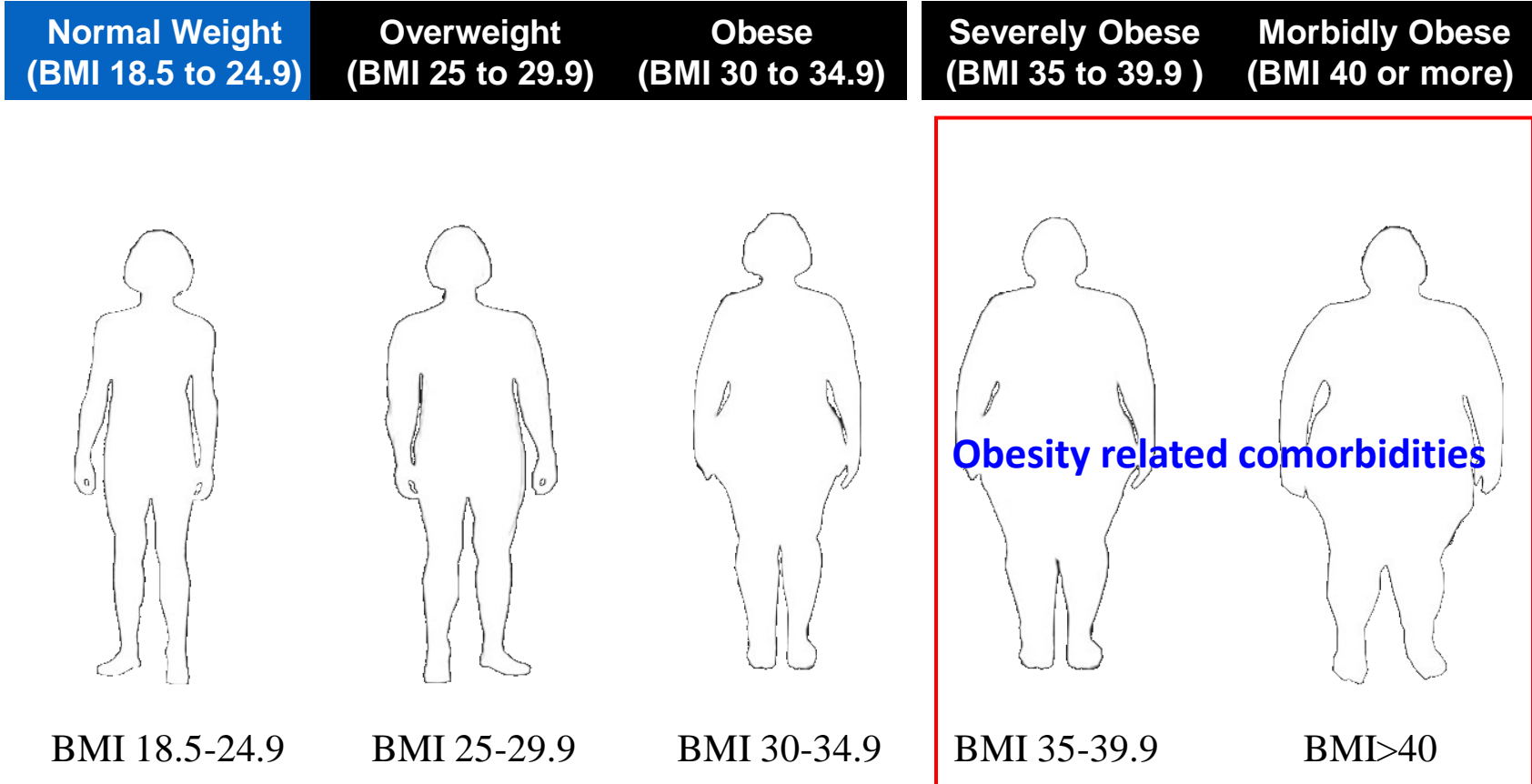
Healthmatters **Scale of the problem**



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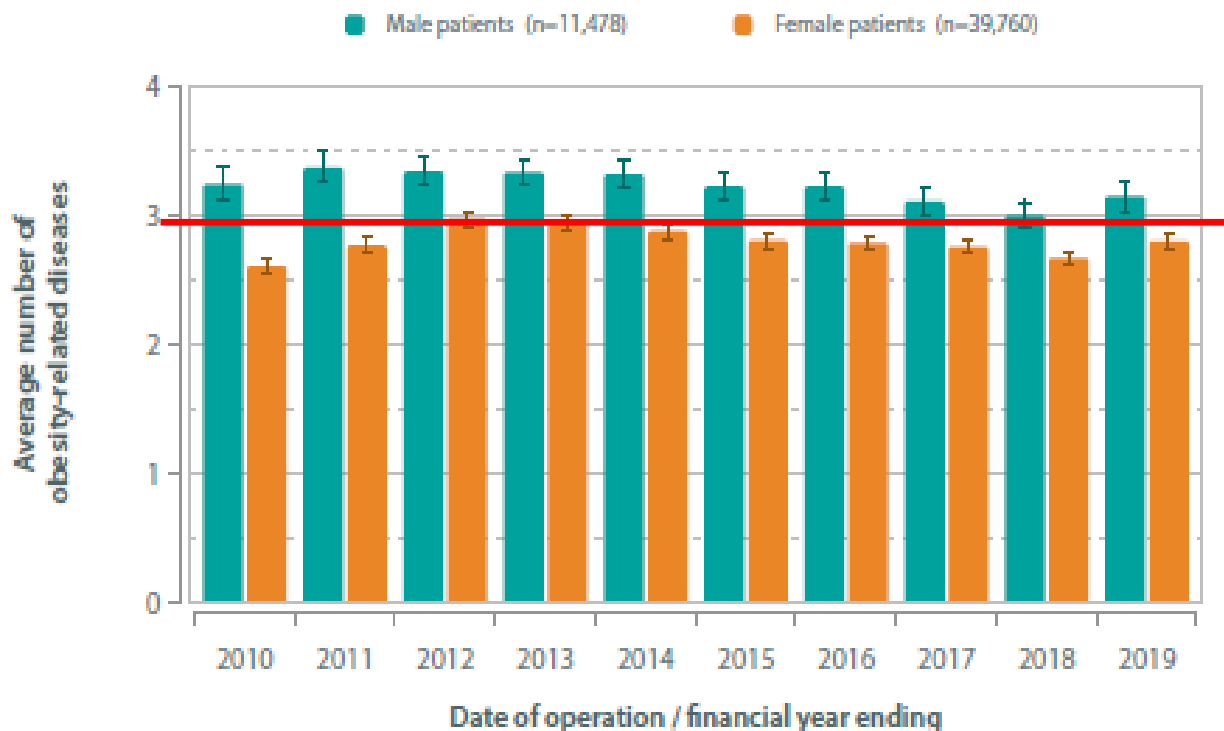
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Scale of problem

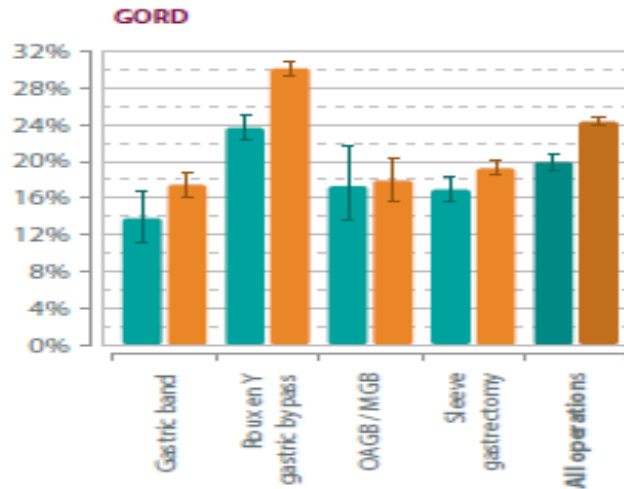
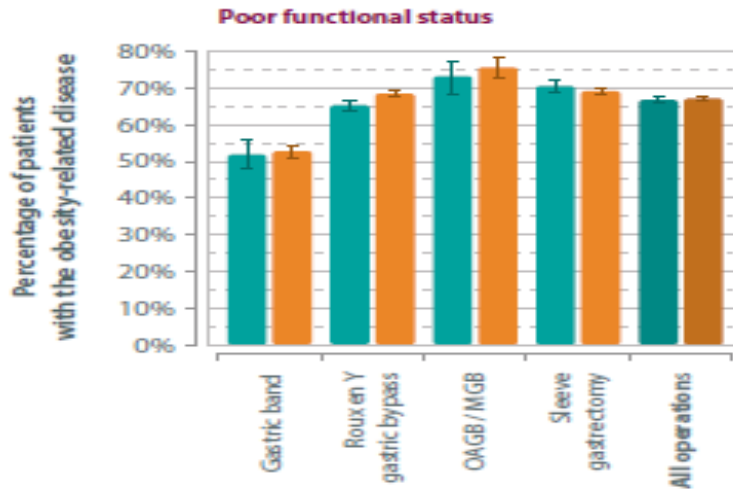
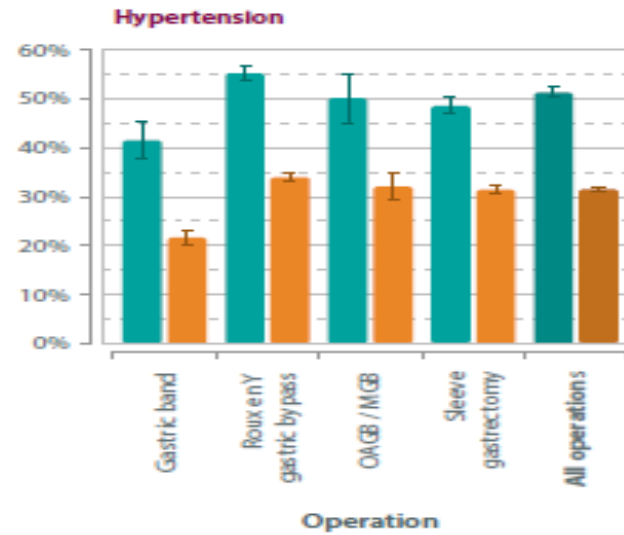
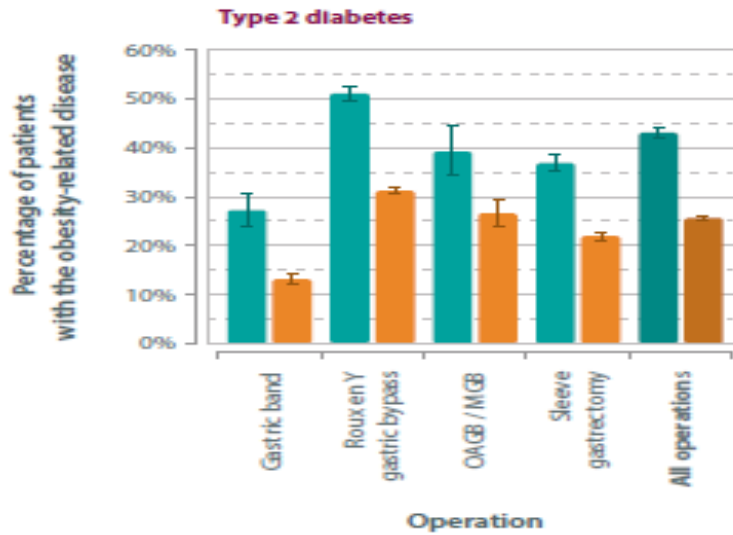


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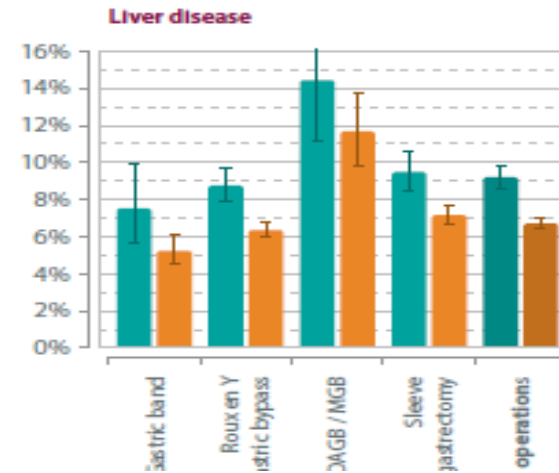
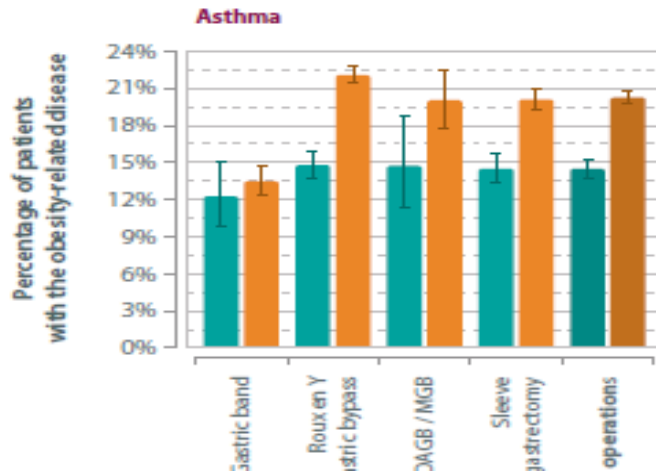
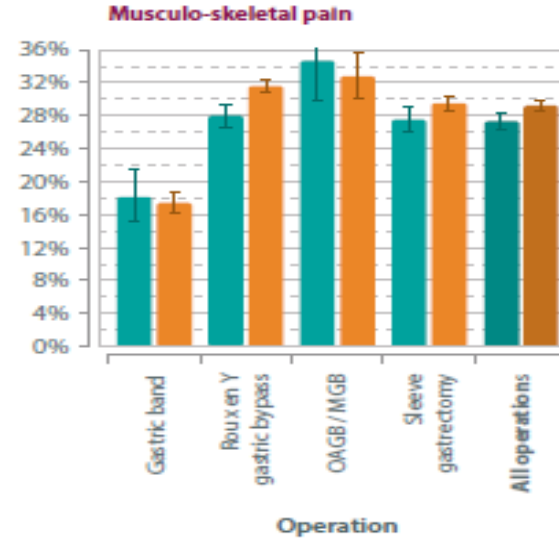
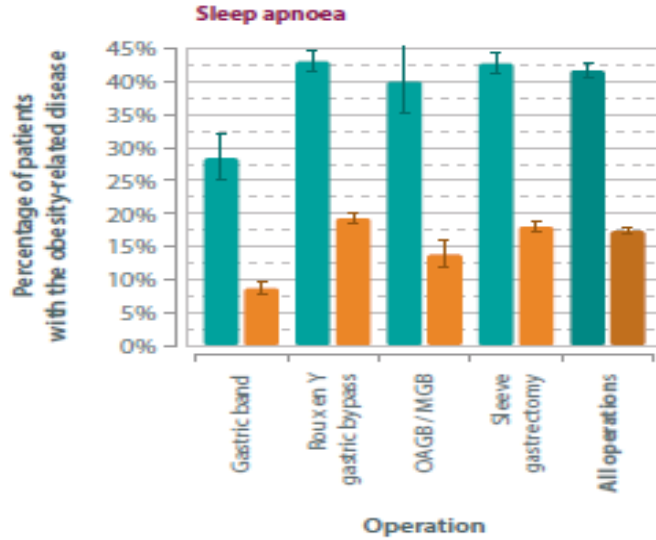
Primary surgery for adults: Average number of obesity-related diseases;
database entries with no missing obesity-related disease data



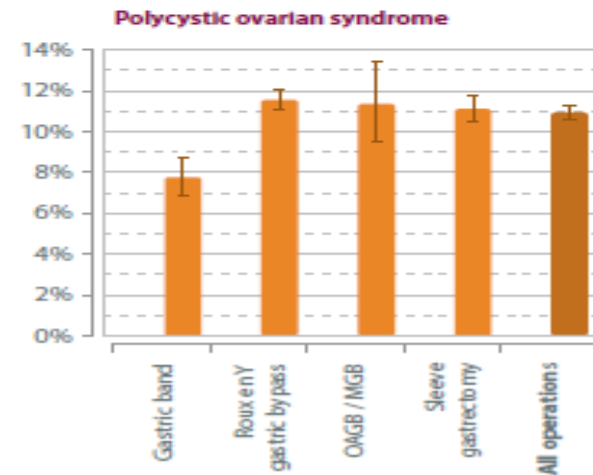
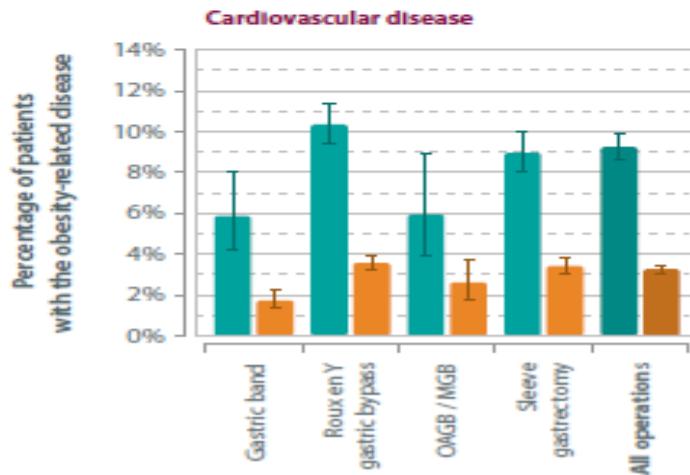
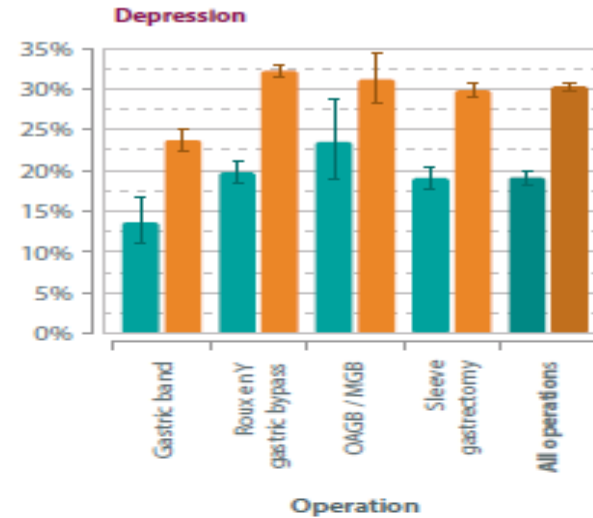
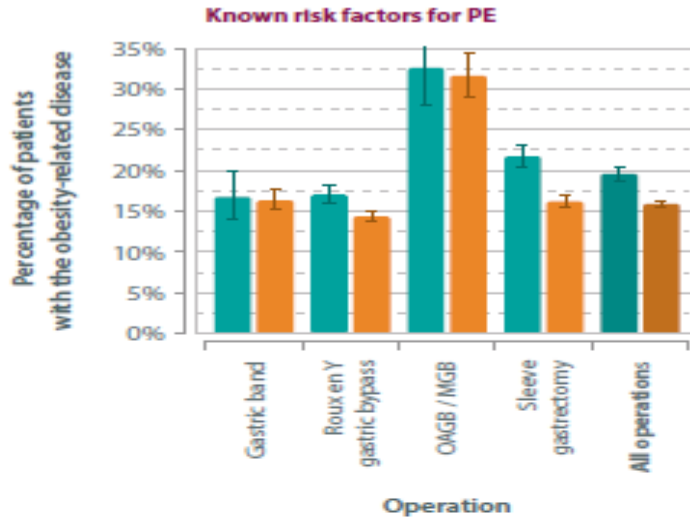
Scale of problem



Scale of problem



Scale of problem



Challenges

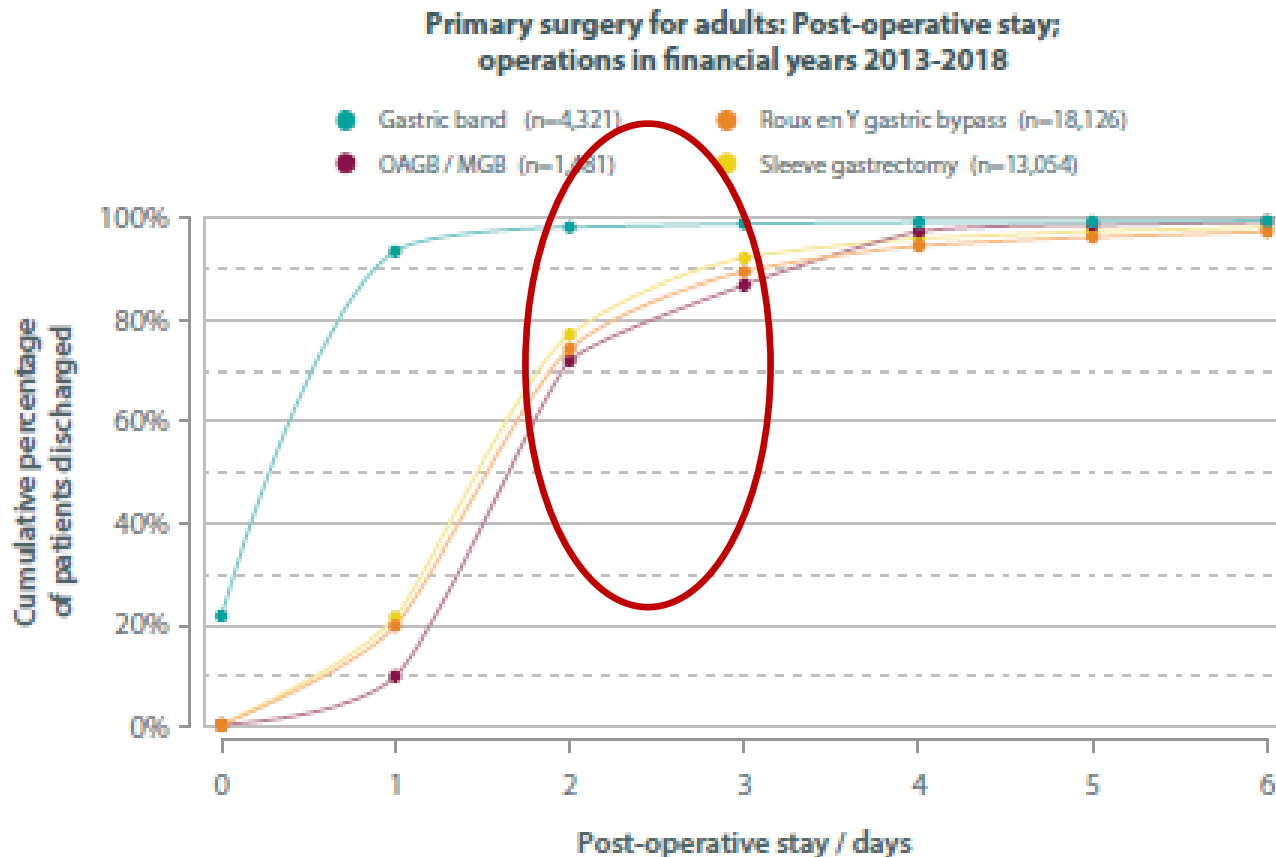
Is operating on patients with morbid obesity safe?



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NBSR data



Primary surgery for adults: post-operative complications; operations in financial years 2013-2018

| | | Complication reported | | | Rate | |
|---|-------------------------------|--------------------------|---------------|-------------|--------------|--------------|
| | | No | Yes | Unspecified | | |
| Operation and kind of post-operative complication | Cardio-vascular complications | Gastric band | 4,075 | 2 | 422 | 0.05% |
| | | Roux en Y gastric bypass | 17,930 | 43 | 1,131 | 0.24% |
| | | OAGB / MGB | 1,484 | 1 | 30 | 0.07% |
| | | Sleeve gastrectomy | 13,086 | 28 | 727 | 0.21% |
| | | All | 36,575 | 74 | 2,310 | 0.20% |
| | Other complications | Gastric band | 4,034 | 30 | 435 | 0.74% |
| | | Roux en Y gastric bypass | 17,509 | 448 | 1,147 | 2.49% |
| | | OAGB / MGB | 1,470 | 18 | 27 | 1.21% |
| | | Sleeve gastrectomy | 12,774 | 303 | 764 | 2.32% |
| | | All | 35,787 | 799 | 2,373 | 2.18% |
| | In-hospital mortality | Gastric band | 4,497 | 0 | 2 | 0.00% |
| | | Roux en Y gastric bypass | 19,061 | 9 | 34 | 0.05% |
| | | OAGB / MGB | 1,510 | 2 | 3 | 0.13% |
| Sleeve gastrectomy | | 13,817 | 5 | 19 | 0.04% | |
| All | | 38,885 | 16 | 58 | 0.04% | |



EMBMI Team



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Article Text

Surgeons Corner

The Feasibility of Laparoscopic Surgery in Gynecologic Oncology for Obese and Morbidly Obese Patients

Article info

PDF

Jessie Peng, BHSc^{*}, Sarah Sinasac, MD^{†, ‡}, Katherine J. Pulman, MD^{†, ‡}, Liying Zhang, PhD[†], Joan Murphy, MD^{†, ‡} and Tomer Feigenberg, MD^{†, ‡}

laparoscopic gynaecologic-oncology procedures for obese patients are feasible and safe



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Considerations

- Preoperative considerations
 - MDT approach
- Intraoperative considerations
 - Approach: lap vs robotic vs open
 - Position
 - Kits
- Postoperative considerations
 - ERAS protocol



Considerations

- Preoperative considerations – MDT approach
 - Anaesthetist
 - Bariatric dietitian
 - Bariatric physiotherapist
 - Metabolic physician
 - Other specialty input
 - Theatre team – planning +/- mock test
 - Admin team – logistic arrangement



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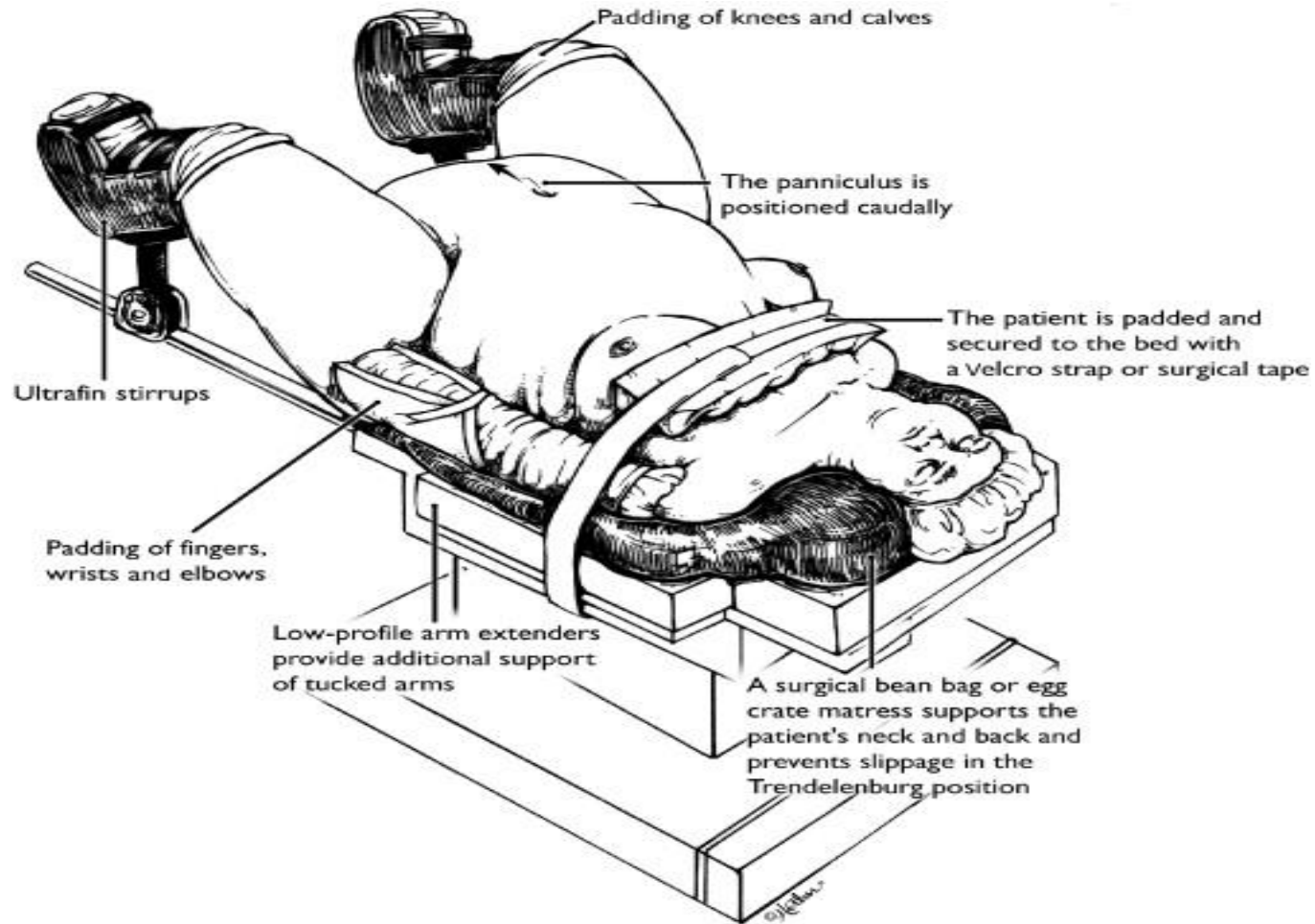
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Considerations

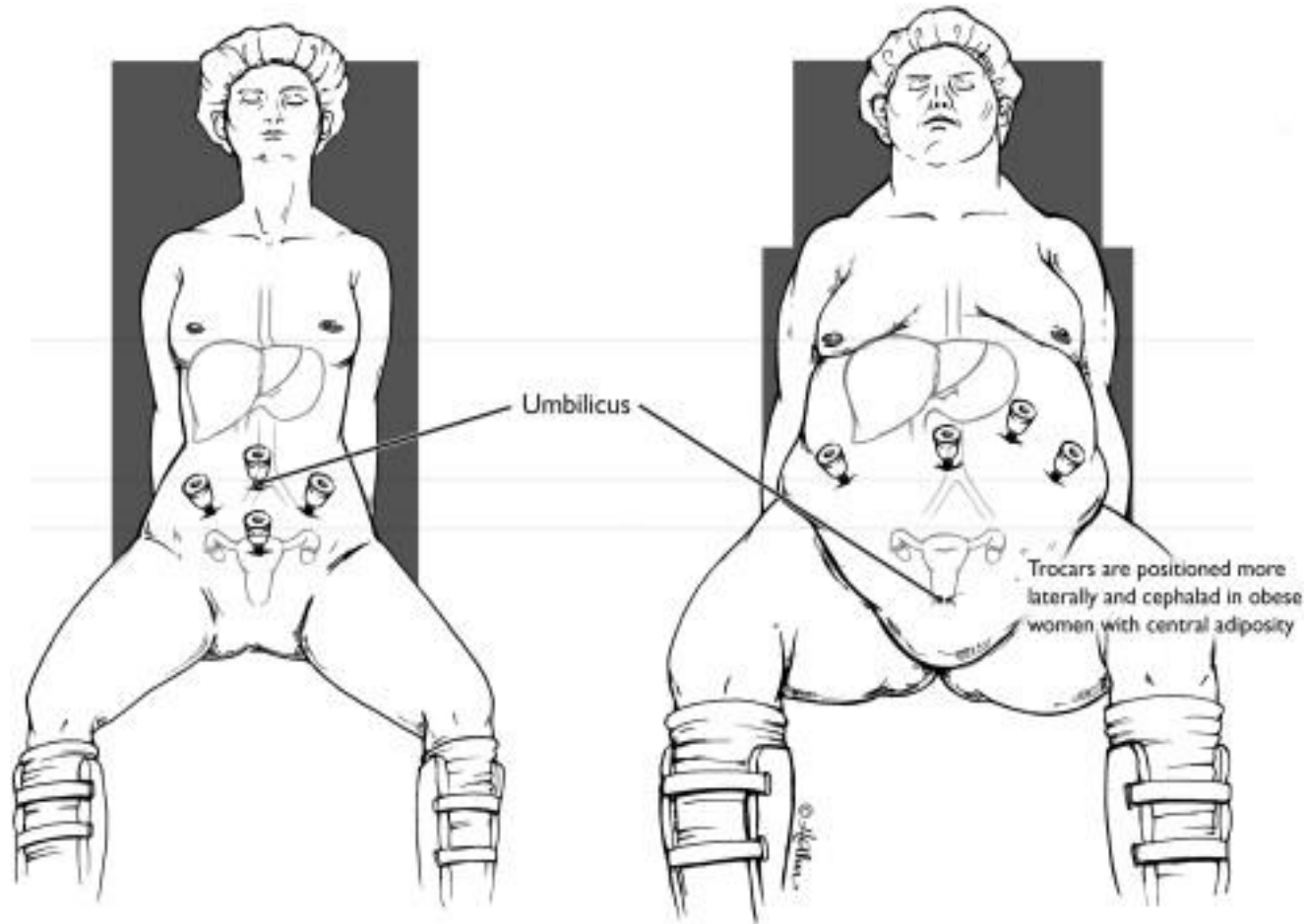
- Intraoperative considerations
 - Planning: Kits, Instruments, table etc
 - Transfer
 - Anaesthesia
 - Positioning
 - Recovery & transfer



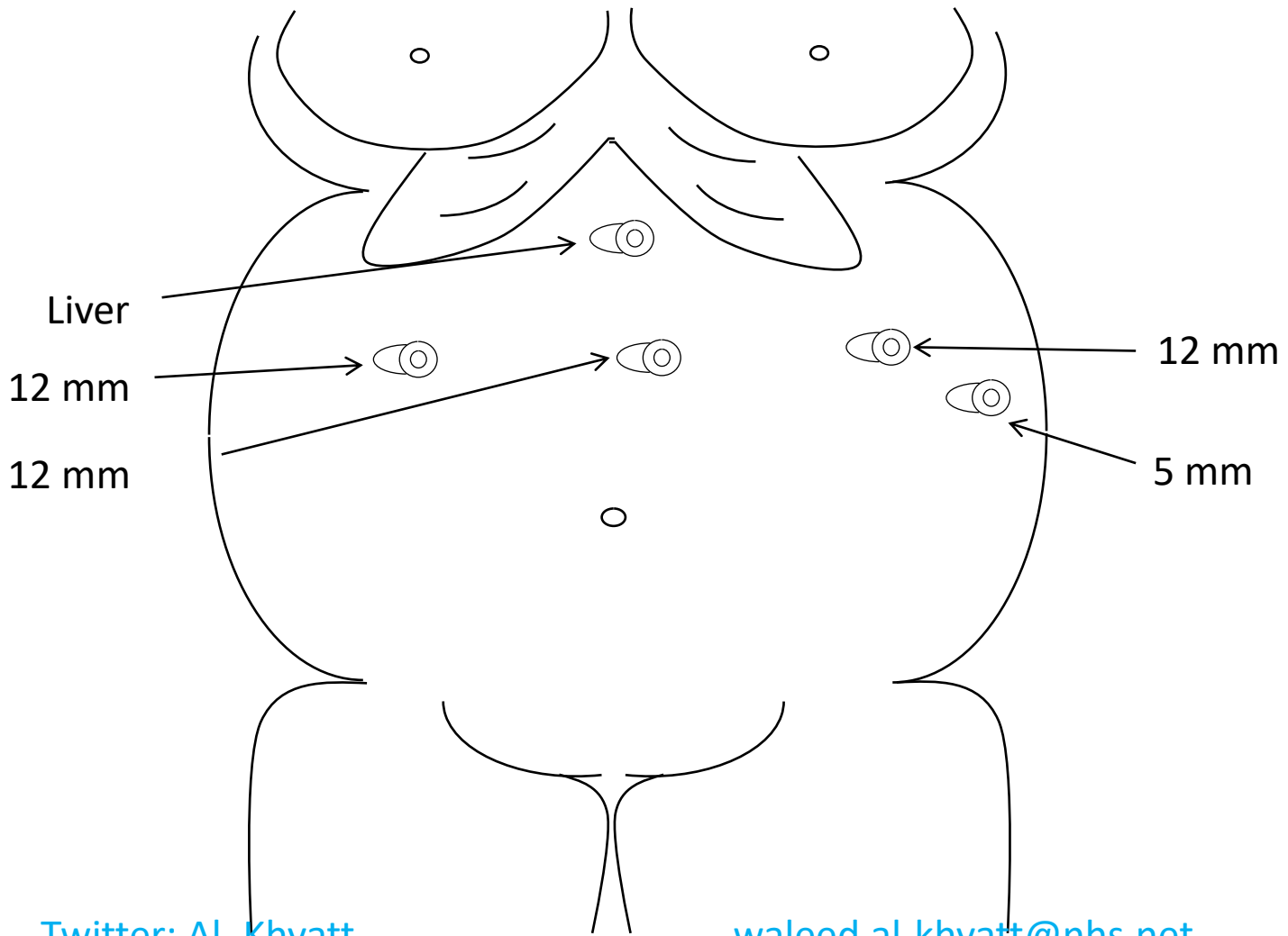
Positioning



Surface landmarks

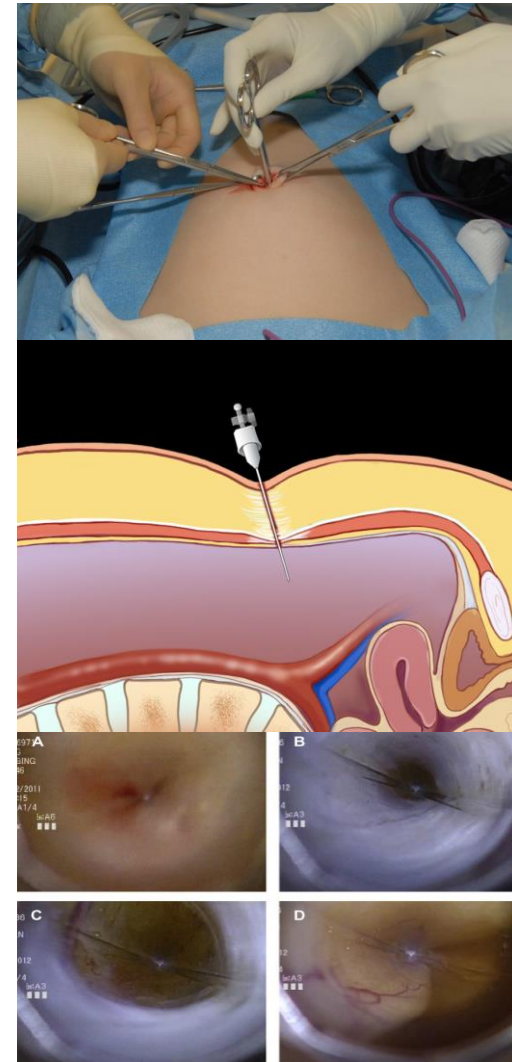


LRYGB

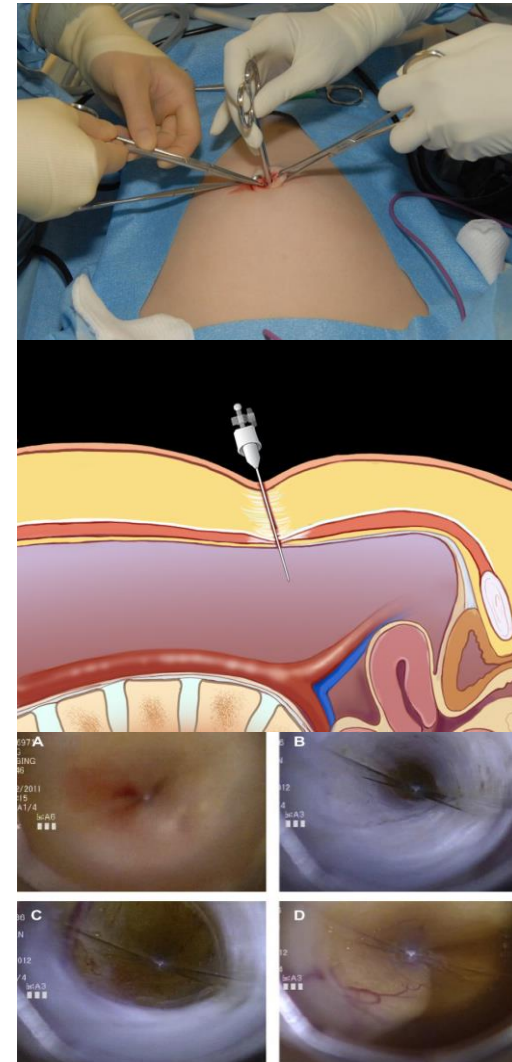


Pneumoperitoneum

- Open (Hasson) approach
- Veress Needle
- Optical port (Visiport)




- Open (Hasson) approach
 - Feasibility?
- Veress Needle
 - Success rate?
- Optical port (Visiport)
 - Evidence-based



Gynecologic Endocrinology and Reproductive Medicine | Published: 08 January 2021

Randomized control trial on effectiveness and safety of direct trocar versus Veress needle entry techniques in obese women during diagnostic laparoscopy

[Joseph I. Ikechebelu](#), [George U. Eleje](#) , [Ngozi N. Joe-Ikechebelu](#), [Chidimma Donatus Okafor](#), [Boniface Chukwuneme Okpala](#), [Emmanuel O. Ugwu](#), [Cyril Emeka Nwachukwu](#), [Chukwuemeka C. Okoro](#) & [Princeston C. Okam](#)

- Vesiport may be an effective alternative to Veress needle for pneumoperitoneum in obese women.
- A significantly lower duration of the procedure shorter exposure to anesthesia.
- Both methods are equally effective as there was no significant difference in the complications recorded.



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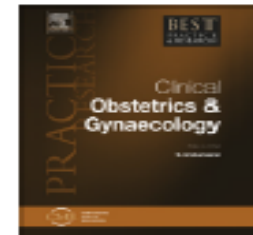
Pneumoperitoneum



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Obesity in laparoscopic surgery

K. Afors, MD ^{a, *},G. Centini, MD, Gynaecology Minimal Access Fellows ^{b,}R. Murtada, MD, Gynaecology Minimal Access Fellows ^{b, b,}J. Castellano, MD, Gynaecology Minimal Access Fellows ^{b,}C. Meza, MD, Gynaecology Minimal Access Fellows ^{b,}A. Wattiez, MD ^c

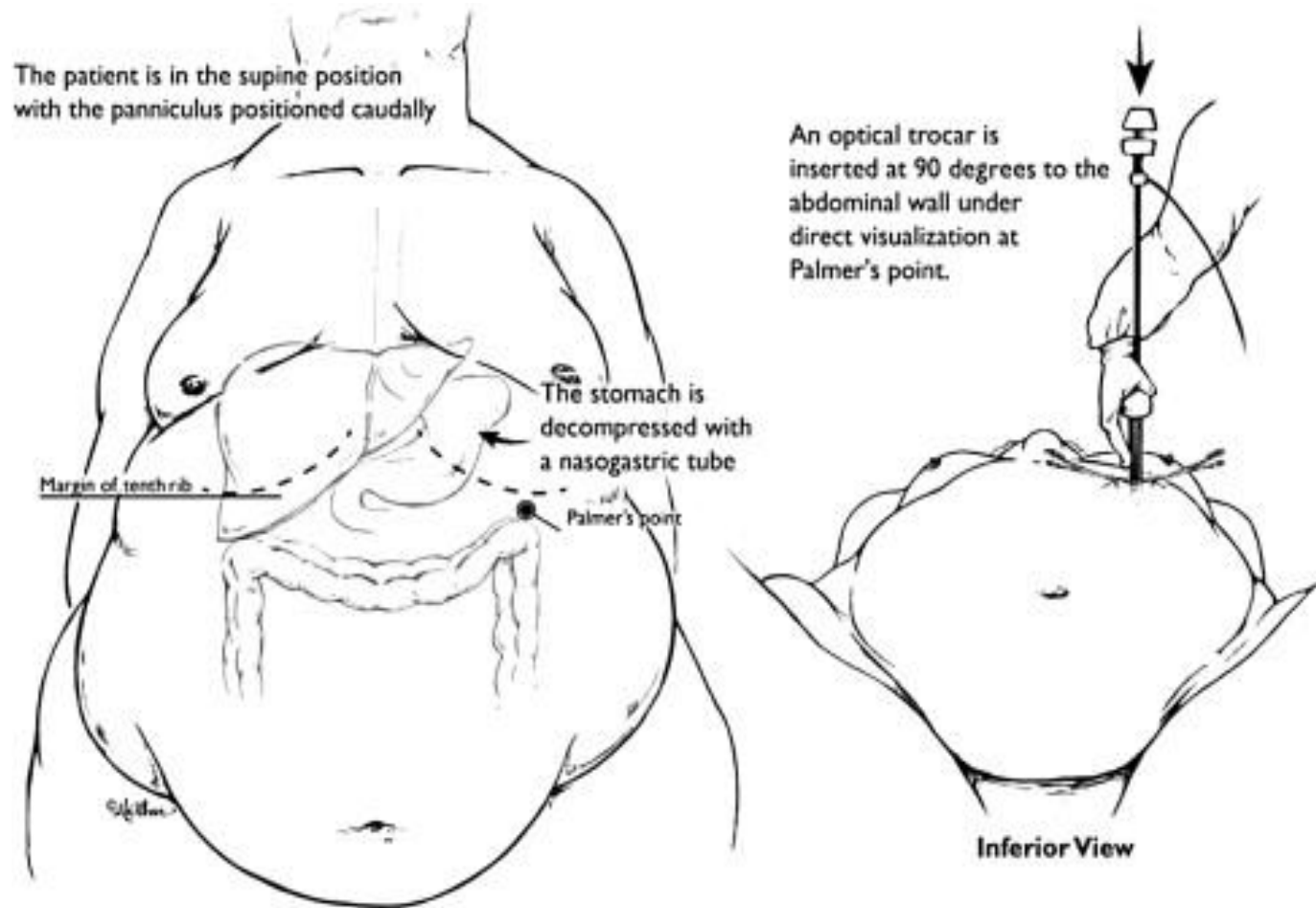
- When compared with direct trocar entry, Veress entry is associated with a higher rate of failed entry, extra-peritoneal insufflation and omental injury.



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Optical port



Optical port



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Postop considerations

- Transfer

- ERAS
 - Mobilisation

 - IVI management

 - Feeding

 - Chest physio + incentive spirometer

 - DVT prophylaxis

 - Pain management

 - Order set blood tests & medications



Conclusions

- The prevalence of obesity continues to rise with 60% of the adult population in the European Union reported as overweight or obese.
- Obesity-related comorbidities are often common
- Holistic MDT approach is key to success
- ERAS protocol is essential part of any successful outcome
- Laparoscopic surgery, pneumoperitoneum & port placement approach – versatility
- BMS may be utilised as a safe model for excellent outcomes

