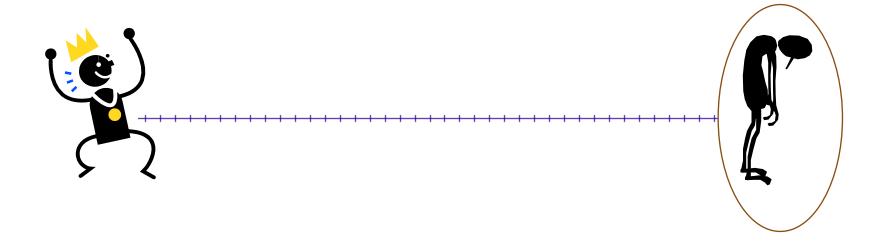


Disclosure

 Speaker honoraria from Novo Nordisk, and reimbursement for educational activities from Johnson & Johnson. All reimbursement directed to my clinical institution.



Supporting adolescent patients





The adolescent - a different patient?

- Autonomy
- Parental involvement
- Risk-taking
- Transition
- Timing





Aim of the pre-op assessment process for all adolescents

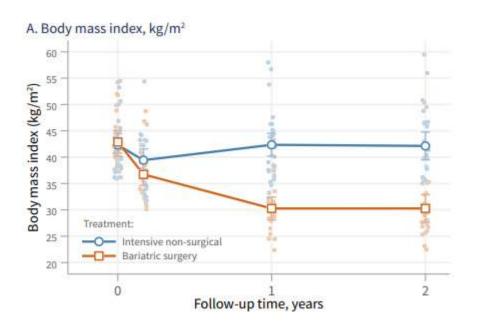
- Identify threats and resources
 - Assessment of mental health
 - Help to think about timing
 - Elucidate the decision process
 - Prepare for behavioural change
 - Assess and activate parental support



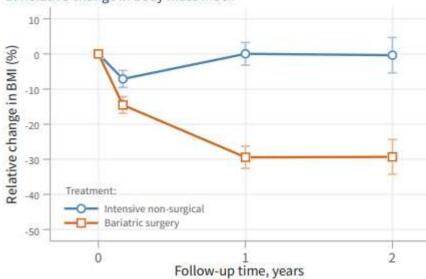
Expectation management







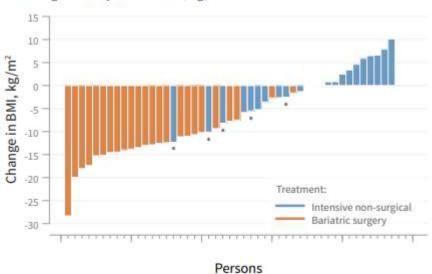
B. Relative change in body mass index



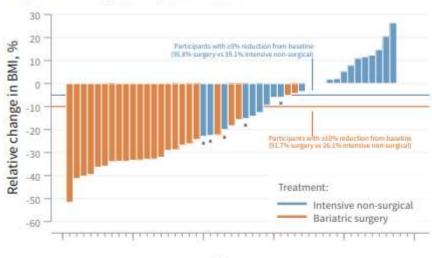
AMOS 2 Change in BMI

Järvholm et al. Lancet Ch&AH 2023

C. Change in body mass index, kg/m2



D. Relative change in body mass index, %





Persons

Manage parents' expectations too

- I had great expectations. Yes. I thought that she would be rescued. ...but I would have liked to be able to give her that boost, so she could feel pretty, and slim, and buy proper clothes. This is sensitive to me (cries).



Support before adolescent bariatric surgery



Keep up the good work!

Break the association between weight-loss and the permission to live a full life.

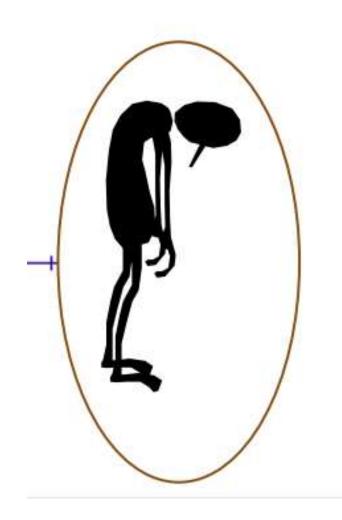
Adapt care to special needs.

Adolescent MBS and mental health - guidelines

With the exception of active psychosis, suicidality, or substance abuse, mental health disorders are not a contraindication to MBS in adolescents. ...

...patients who present with mental health disorders should be carefully monitored after surgery to promote positive mental health...

Pratt et al. ASMBS pediatric metabolic and bariatric surgery guidelines, 2018



Mental health in adolescents before bariatric surgery AMOS2

AMOS2:

- 19% (9/48) with depressive symptoms at a clinical level. (ref 5-8%)
- 21% (10/48) with any suicidal ideation. (ref 12%)
- 33% (15/46) screened positive for binge eating disorder at baseline
- 54% (26/48) screened positive for ADHD and/or ASD (parent-reported)

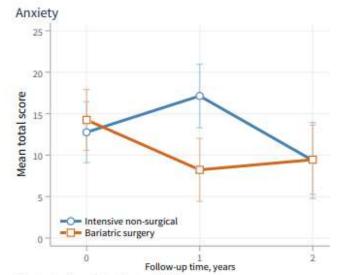


Mental health in adolescents presenting for bariatric surgery

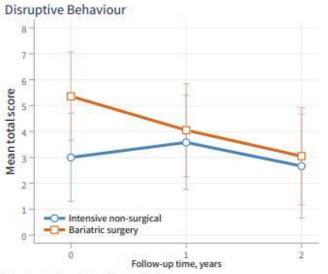


 Adolescents presenting for bariatric surgery do not necessarily have more mental health problems than other adolescents with severe obesity seeking treatment.

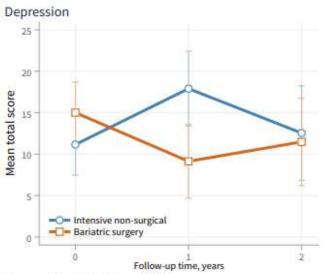
Hunsaker et al. J of Adol Health 2018



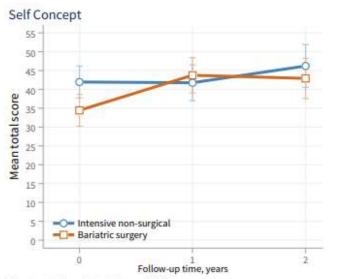
Treatment x time interaction, p=0-0005



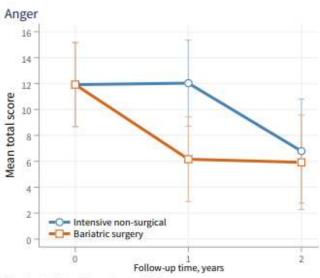
Treatment x time interaction, p=0-19



Treatment x time interaction, p=0.0007



Treatment x time interaction, p=0.0026



Treatment x time interaction, p=0.015

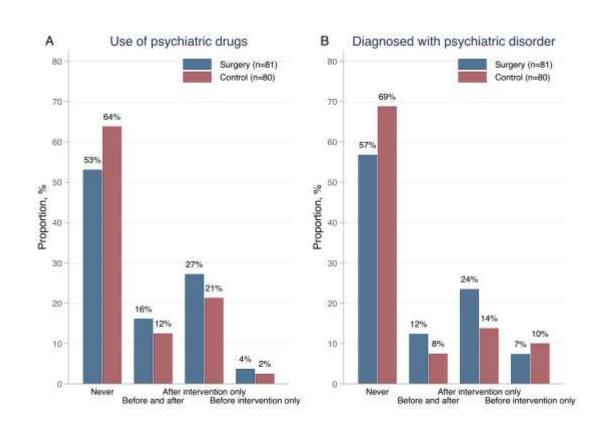
AMOS2 2-year follow-up

Järvholm et al. Lancet Ch&AH 2023

Mental health outcomes over five years in adolescents

 Increased need of mental health treatment in the transition from adolescence to young adulthood regardless of treatment seeking status.

- More prescribed psychiatric drugs and mental health treatment in both groups compared to population samples
- Operated adolescents had significantly more hospital-based mental health treatment than adolescents in conventional treatment. The reason is not known.



Support before adolescent bariatric surgery

- Inform
 - Long-term alleviation of mental health problems should not be expected, and adolescents and their caregivers should be given realistic expectations in advance of embarking on a surgical pathway.
- Offer effective treatment for mental health disorders

Long-term support after adolescent bariatric surgery

"No, well, it's clear that you have to be weighed and measured and have your blood work done and everything, but you have to have someone to talk to as well who might not just look at the numbers but also look at the brain instead" (0112)

Adolescent patient interviewed 10 years after undergoing bariatric surgery, AMOS unpublished



MBS and suicidal behaviour

 Several reports of increased risk of suicide in adults after bariatric surgery.

The hazard ratio for suicide was 2.4 times higher in surgery compared with non-surgery participants (95% CI: 1.57-3.68; p < 0.001), primarily in participants with ages at surgery between 18 and 34 years.

Substance use after adolescent bariatric surgery

Increased risk of alcohol use disorder after bariatric surgery in adults.

 Nearly half of those who underwent MBS as adolescents screened positively for AUD, symptoms of alcohol-related harm, or alcoholrelated problems 8 years post-MBS.

King et al. 2012 JAMA; Svensson et al. 2013 Obesity; White et al. 2023 Ann Surg.

Sexual risk-taking?

Follow-up 4 years after bariatric surgery – adolescent females

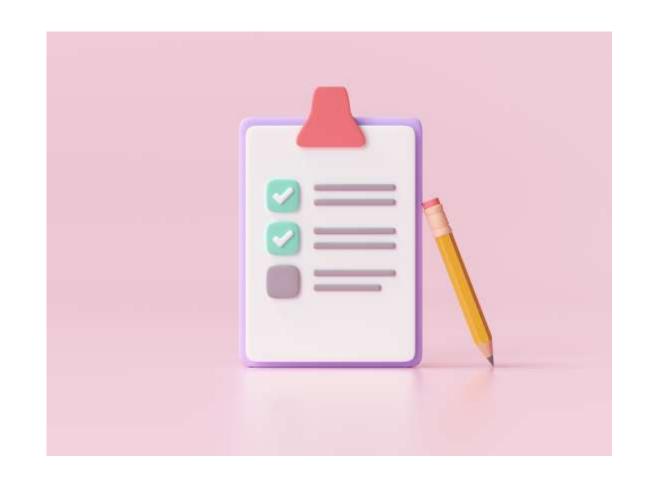
- 25% reported any pregnancy
- 19% had a child
- 50% children born to teen mothers.



Zeller et al. SOARD 2019

What should we tell the adolscent patient?

- Bariatric surgery makes you healthier, but not necessarily happier.
- We would like to follow you for many years after your MBS.
- Please contact us if you need our help!



Conclusions and implications

- Adolescents/young adults seem to experience more mental health problems after bariatric surgery than middle aged adults. Offer age-appropriate care!
- Continued repeated monitoring of mental health over several years is necessary in adolescents undergoing bariatric surgery. Extra attention to suicidal behavior, self-harm, and substance use disorder. Address sexual risk-behaviors.
- Manage expatiations in both adolescents and their caregivers.
- Offer effective treatment for mental health disorders.

Mind the gap between child and adult clinics!

