Bariatric Surgery in Patients with known malignancies. Which procedure to choose as a bridge to curative treatment?

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Background

Body-mass index and risk of 22 specific cancers: a population-based cohort study of 5·24 million UK adults

Krishnan Bhaskaran, Ian Douglas, Harriet Forbes, Isabel dos-Santos-Silva, David A Leon, Liam Smeeth

- Each **5** kg/m² increase in BMI was roughly linearly associated with cancers of the **uterus** (hazard ratio [HR] 1·62, 99% CI 1·56–1·69;

- BMI was positively associated with **liver** (1·19, 1·12–1·27), **colon** (1·10, 1·07–1·13), **ovarian** (1·09, 1.04–1.14), and postmenopausal **breast** cancers (1·05, 1·03–1·07) overall

This Issue | Views 42,893 | Citations 9 | Altmetric 1155 | Comments 1

Original Investigation

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Association of Bariatric Surgery With Cancer Risk and Mortality in Adults With Obesity

Ali Aminian, MD[1]; Rickesha Wilson, MD[1]; Abbas Al-Kurd, MD[1]; et al

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JAMA. 2022;327(24):2423-2433. doi:10.1001/jama.2022.9009

- **30 318** patients (median age, 46 years; median body mass index, 45; 77%
- The cumulative incidence of the primary end point at 10 years was **2.9%** (95% CI, 2.2%-3.6%) **in the bariatric** surgery group and **4.9%** (95% CI, 4.5%-5.3%) in **the nonsurgical control group** (absolute risk difference, 2.0% [95% CI, 1.2%-2.7%]; adjusted hazard ratio, 0.68 [95% CI, 0.53-0.87], *P* = .002).
- The cumulative incidence of **cancer-related mortality at 10 years** was **0.8%** (95% CI, 0.4%-1.2%) in the bariatric surgery group and **1.4%** (95% CI, 1.1%-1.6%) in the nonsurgical control group (absolute risk difference, 0.6% [95% CI, 0.1%-1.0%]; adjusted hazard ratio, 0.52 [95% CI, 0.31-0.88], *P* = .01).

- **Conclusions and Relevance:**

  Among adults with obesity, bariatric surgery compared with no surgery was associated with a significantly lower incidence of obesity-associated cancer and cancer-related mortality.

- Can we use bariatric surgery to facilitate cancer surgery?

- Can that improve outcomes of cancer surgery?

Multifactorial

- Stage of cancer
- Hormonal factors
- Biology of cancer (slow growing)
- Organ location
- ?Genetics

Clinical Research | Published: 08 April 2013

Laparoscopic Sleeve Gastrectomy as a Step Approach for Morbidly Obese Patients with Early Stage Malignancies Requiring Rapid Weight Loss for a Final Curative Procedure

Melissa Gianos, Abraham Abdemur, Samuel Szomstein & Raul Rosenthal

Obesity Surgery **23**, 1370–1374 (2013) | Cite this article

- 4 patients (M=3)
- mean age 53.75 years (range 27-67 years), mean BMI **48.25** kg/m^2 (range 42–55 kg/m^2).
- Laparoscopic Sleeve Gastrectomy
- Mean weight loss at 3 months was 59.35 lbs (range 28–79 lbs).
- Cancer Diagnosis: 1 x **small bowel carcinoid**
  2 x **renal hypernephroma**
  1 x **prostate cancer**
- At 3 months, patients underwent a definitive procedure in accordance to their type of malignancy.
- There were neither postoperative complications nor mortality.

- **Conclusions:** Laparoscopic sleeve gastrectomy is a safe and reasonable approach to effectively reduce weight in order to allow morbidly obese patients with early stage malignancies to undergo a second oncologic procedure.

BRIDGE Study

Bariatric suRgery as brIDge to cancer surGEry

- Inclusion criteria:

- *Patients with obesity diagnosed with primary cancer of any organ: Can they undergo bariatric/metabolic surgery (BMS) to facilitate subsequent cancer surgery and improve outcomes?*
- *Patients in whom BMS was done as a bridge to facilitate surgery for cancer*
- *Any Surgical or Endoscopic (Eg: gastric balloon, Endoscopic Sleeve Gastroplasty, gastric plication) bariatric procedure as bridge to facilitate subsequent operation for malignancy*

- Understand challenges in diagnosis and management of malignancies in such patients and options of different bariatric procedures

- This is a registered multi-national audit
- All contributors will be collaborative authors as per protocol
- Please DM us for further details

Chetan Parmar & Omar Ghanem

ELSEVIER

Surgery for Obesity and Related Diseases ■ (2021) 1–9

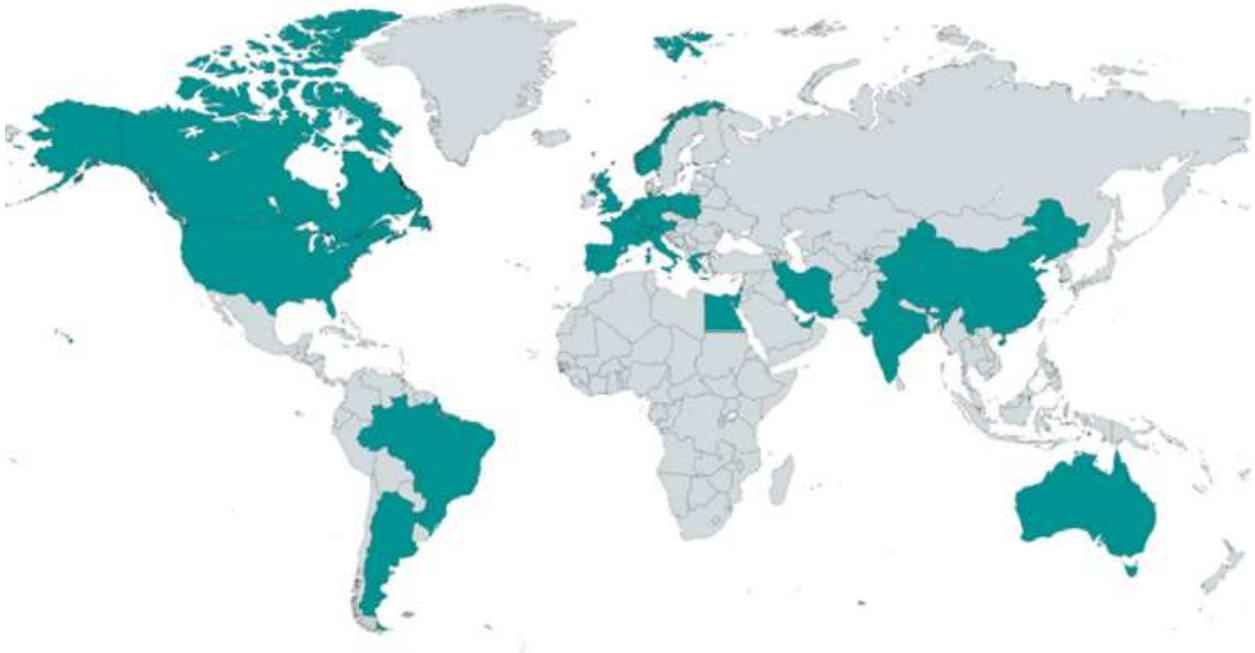
SURGERY FOR OBESITY AND RELATED DISEASES

Original article

Esophageal and gastric malignancies after bariatric surgery: a retrospective global study

Chetan Parmar, M.S., D.N.B., F.R.C.S.[a,*,†], Roxanna Zakeri, M.R.C.S.[a,b,†], Mohamed Abouelazayem, M.Sc., M.R.CS.[c], Thomas H. Shin, M.D., Ph.D.[d], Ali Aminian, M.D., F.A.S.M.B.S[d], Tala Mahmoud, M.D.[e], Barham K. Abu Dayyeh, M.D., M.P.H.[e], Melissa Y. Wee[f], Laura Fischer, M.D.[g], Freek Daams, M.D., Ph.D.[h], Kamal Mahawar, F.R.C.S.Ed.[i], on behalf of OGMOS Study Group

- Multinational,
- retrospective
- 75 centres
- **25** countries
- **170** cases



COUNTRY	NO. OF CASES
Argentina	6
Australia	11
Austria	2
Belgium	4
Brazil	7
Canada	6
China	1
Egypt	1
France	11
Germany	2
Greece	4
India	1
Iran	1
Israel	2
Italy	12
Netherlands	17
Norway	1
Poland	1
Portugal	1
Qatar	1
Spain	9
Switzerland	10
United Arab Emirates	2
United Kingdom	27
United States	30
TOTAL	170

Obesity Surgery
https://doi.org/10.1007/s11695-022-06304-5

ORIGINAL CONTRIBUTIONS

Oesophageal and Gastric Cancer After Bariatric Surgery: an Up-to-Date Systematic Scoping Review of Literature of 324 Cases

Chetan Parmar[1] · Sjaak Pouwels[2,3]

Received: 14 May 2022 / Revised: 25 September 2022 / Accepted: 28 September 2022

Social media

facebook

- 38 patients

9 countries

- England
- Northern Ireland
- Italy
- Netherlands
- Greece
- Egypt
- USA
- Mexico
- Argentina

- Female = 31/38
- Mean age = 49.6 years (24 – 68)
- Mean BMI = 50.8 kg/m2 (35.6 – 69)
- - Mean weight (at time of diagnosis of cancer)= 141 kgs

  - Mean weight at bariatric surgery= 136.2 kgs

  - Mean weight at time of cancer surgery= 113 kgs

- **Organs of origin of cancer**

Uterus x 21	(CAH – T3a)
Breast x 2	(TisNoMo, T3N1Mo)
Kidney x 3	(T2NoMo)
Pancreas x 1	(IPMN)
Prostate x 1	(T1cNoMoStage II)
Colon x 1	(T3N1Mo)
Rectum x 3	(T2 -T3No)
Small bowel x 2	(carcinoid,NET)

Retroperitoneal sarcoma x 1 (T2NoMo)

- **Operations performed**

  SG = 27
  RYGB = 4
  OAGB = 4

- Uterine cancers (SG = 19, RYGB = 1, OAGB =2)

- Days from diagnosis of cancer to bariatric surgery: Mean 235 days

- Days from bariatric surgery to cancer surgery: Mean 158 days

- Mortality 2

  - haemorrhagic shock
  - unknown

Conclusions

- Raising awareness
- Broadening horizons
- Choice of surgery recommendation is difficult
- Sleeve Gastrectomy seems safe and commonly used at the moment
  (organ of origin!)

Future:

- Ethics approval? Eg: IFSO/Regional chapters ?Registry
- Hormonal Assays
- Microbiome
- Genetics
- Systemic metabolic changes

- Role of pharmacotherapy and endoscopic therapies?

Thank you !

@drcdparmar