Increased risks of oesophago-gastric cancer following sleeve and bypass

Paul Burton

Disclosures

ANZMOSS
Australian & New Zealand
Metabolic and Obesity Surgery Society

AANZGOSA
Australian & Aotearoa New Zealand
Gastric & Oesophageal Surgery Association

1. IFSO guidelines (position statement)

2. Mechanisms
    1. Reflux and bariatric surgery
    2. Pathophysiology of Barret's and OA

3. Literature on bariatric surgery and oesophageal adenocarcinoma

4. Epidemiology
    1. of oesophageal adenocarcinoma
    2. Nature of other exposure related malignancies

IFSO Position Statement on the Role of Esophago-Gastro-Duodenal Endoscopy Prior to and after Bariatric and Metabolic Surgery Procedures

Wendy A. Brown[1] · Yazmin Johari Halim Shah[1] · George Balalis[1] · Ahmad Bashir[1] · Almino Ramos[1] · Lilian Kow[1] · Miguel Herrera[1] · Scott Shikora[1] · Guilherme M. Campos[1] · Jacques Himpens[1] · Kelvin Higa[1]

4. EGD should be undertaken routinely for all patients after bariatric surgery at 1 year and then every 2–3 years for patients who have undergone LSG or OAGB to enable early detection of Barrett's esophagus or upper GI malignancy

5. EGD should be performed following AGB and RYGB on the basis of upper GI symptoms.

Barrett's screening

- Barrett's oesophagus (no dysplasia) Follow up endoscopy 3-5 years
- 25 fold increased risk of oesophageal adenocarcinoma with Barrett's
- Screening for BE in the general population is not recommended.
- Screening for BE can be considered in those with chronic reflux and multiple risk factors (male)
- Screening for BE should generally not be performed in women with chronic GERD or men younger than 50 years with chronic GERD.

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Lilian Kow [1] ·

- Oesophageal carcinoma and (adenocaricnoma) are rare
- 39% re obesity Highest population attributable fractions were observed for oesophageal adenocarcinoma
- Efficacy of Barrett's screening programs is unclear
- To account for population ageing with time since exposure and the latent period, generally use prevalence data for the age category 10 years younger than the corresponding cancer incidence age category.
- (For example, cancer incidence in the 45–54 years age group in 2010 should be attributed to exposure in the 35–44 years age group in 2001).

Screening criteria World Health organisation

1. The condition should be an important health problem.
2. There should be an accepted treatment for patients with recognized disease.
3. Facilities for diagnosis and treatment should be available.
4. There should be a recognizable latent or early symptomatic phase.
5. There should be a suitable test or examination.
6. The test should be acceptable to the population.
7. The natural history of the condition, including development from latent to declared disease, should be adequately understood.
8. There should be an agreed policy on whom to treat as patients.
9. The cost of case-finding (including a diagnosis and treatment of patients diagnosed) should be economically balanced in relation to possible expenditure on medical care as a whole.
10. Case-finding should be a continuous process and not a "once and for all" project.

IFSO position statement

Hummels own goal gets France off to winning start at Euro 2020 ...

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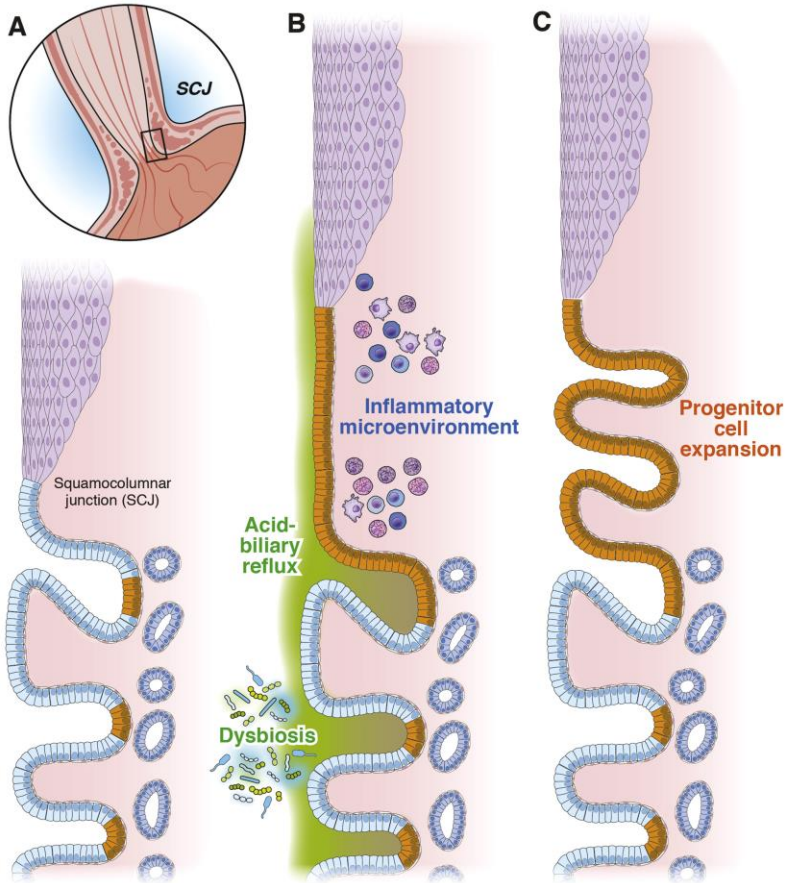
Gastroenterology 2018;154:406–420

Insights Into the Pathophysiology of Esophageal Adenocarcinoma



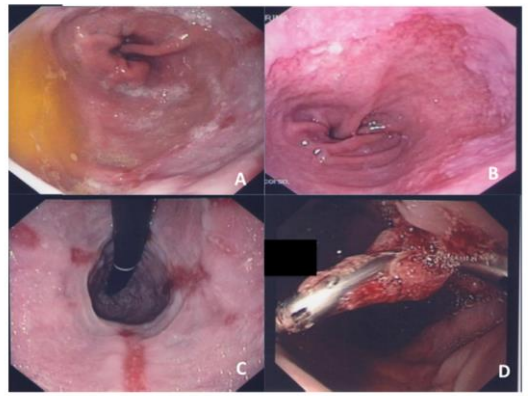
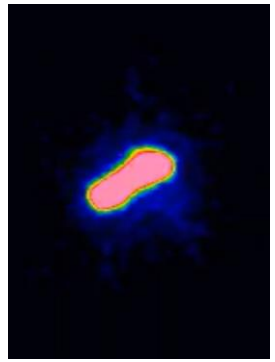
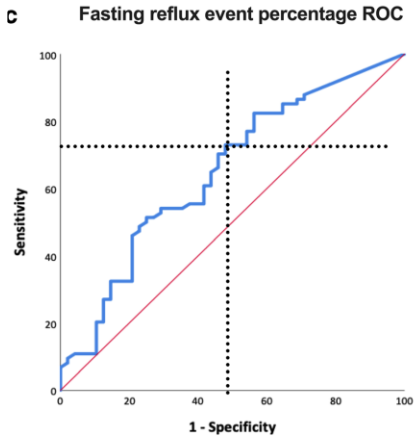


Fig. 2. (A) Biliary-like esophageal reflux; (B) Upward migration of "Z" line; (C) Grade D erosive esophagitis; (D) Hemostatic clip placement after "Z" line biopsy.



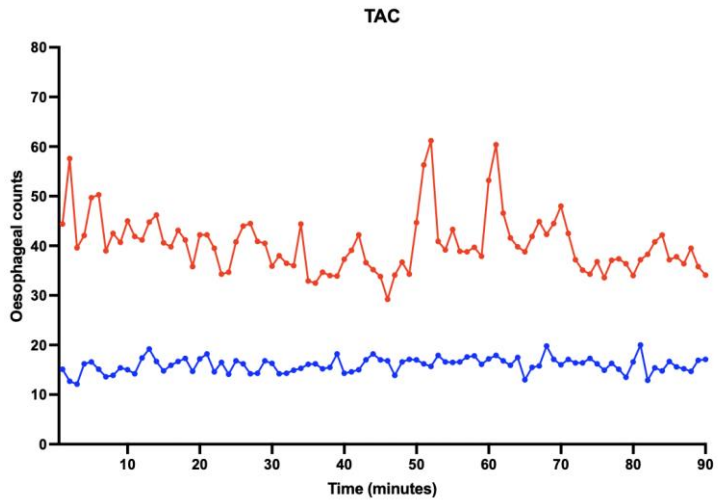


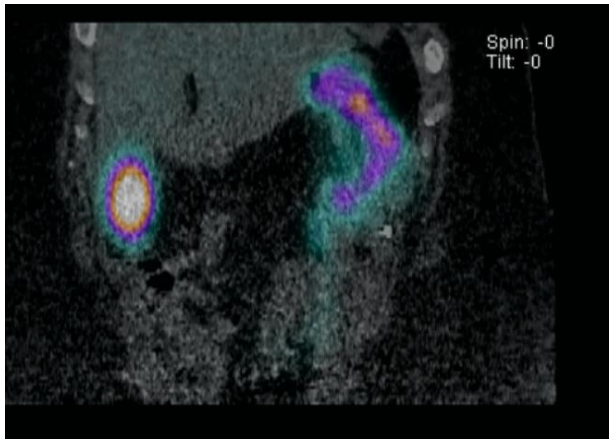
Impaired esophageal peristalsis, *N* (%)	11 (22.9)	28 (56.8)	*0.085*
24-h pH monitoring			
Total acid exposure, median (IQR), %	4.0 (5.2)	9.2 (13.0)	*<0.001^*
Number of acid events, median (IQR), *N*	37 (37)	50 (54)	*<0.001^*
Duration of each acid event, median (IQR), minutes	1.2 (2.6)	2.3 (2.5)	*0.435^*
Erect acid exposure, median (IQR), %	5.0 (7.7)	7.6 (9.1)	*<0.001^*
Supine acid exposure, median (IQR), %	0.6 (7.0)	11.3 (17.6)	*<0.001^*
Supine reflux event percentage, median (IQR), %	10.0 (18.6)	22.8 (21.4)	*0.005^*

AUC = 0.649 (95% confidence interval 0.549 - 0.750)
p=0.006
For sensitivity 73.0% and specificity 52.1% (dotted line intersection), the threshold set at fasting acid exposure of 11.7%


ET
OLYMPICS 2024: ALL ABOUT
TURKISH SHOOTER YUSUF DIKEC


ISSF


TAC
Oesophageal counts
Time (minutes)
0
10
20
30
40
50
60
70
80
90


Spin: -0
Tilt: -0

Prior literature oesophgeal carcinoma and bariatric surgery

	Impact on risk	Risk	age	Follow up
Lazzati, 2023		1.5 ve 2.3 IRR 1.54 (0.99-2.38) .05	40.4	6.06
Bevilacqua 2020	-	0.04%	42.8	5.3
Andalib	-	1.45 (95%CI: .19–65.5)	44.4	7.6
Meret 2017	-	(SIR 1.6; 95% CI .7–3.2)	40	3.7
Schaeuer		0 vs 16		
Leslie		0.5%	46.7	3.9
WY 2022		1.8/3.5	54	13.8
Melestrom	-	0.1%	?	?

BRITISH MEDICAL JOURNAL

LONDON SATURDAY NOVEMBER 10 1956

LUNG CANCER AND OTHER CAUSES OF DEATH IN RELATION TO SMOKING

A SECOND REPORT ON THE MORTALITY OF BRITISH DOCTORS

BY

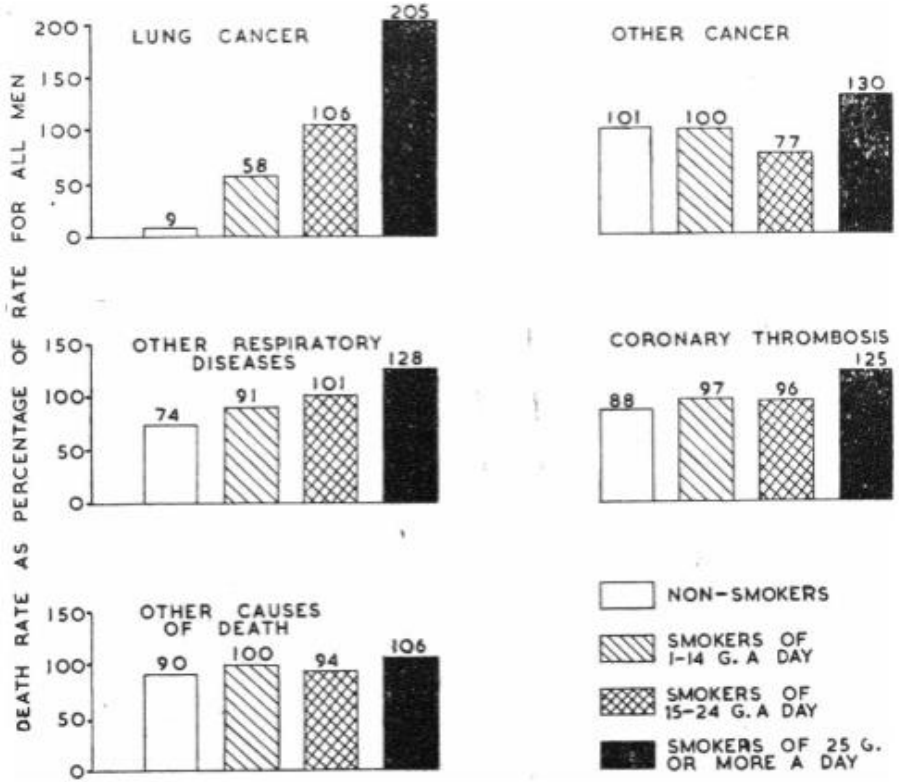
RICHARD DOLL, M.D., M.R.C.P.

Member of the Statistical Research Unit of the Medical Research Council

AND

A. BRADFORD HILL, C.B.E., F.R.S.

Professor of Medical Statistics, London School of Hygiene and Tropical Medicine; Honorary Director of the Statistical Research Unit of the Medical Research Council



Relationship between death rate, expressed as a percentage of the rate for all men, and the amount smoked, for five disease groups.

J.A.M.A., Aug. 7, 1954

THE RELATIONSHIP BETWEEN HUMAN SMOKING HABITS AND DEATH RATES

A FOLLOW-UP STUDY OF 187,766 MEN

E. Cuyler Hammond, Sc.D.

and

Daniel Horn, Ph.D., New York

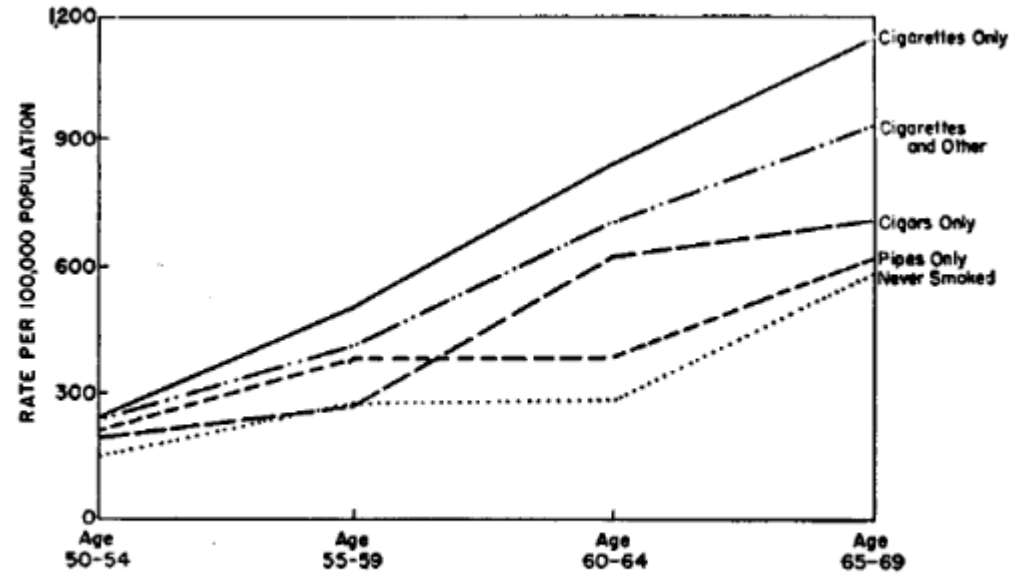
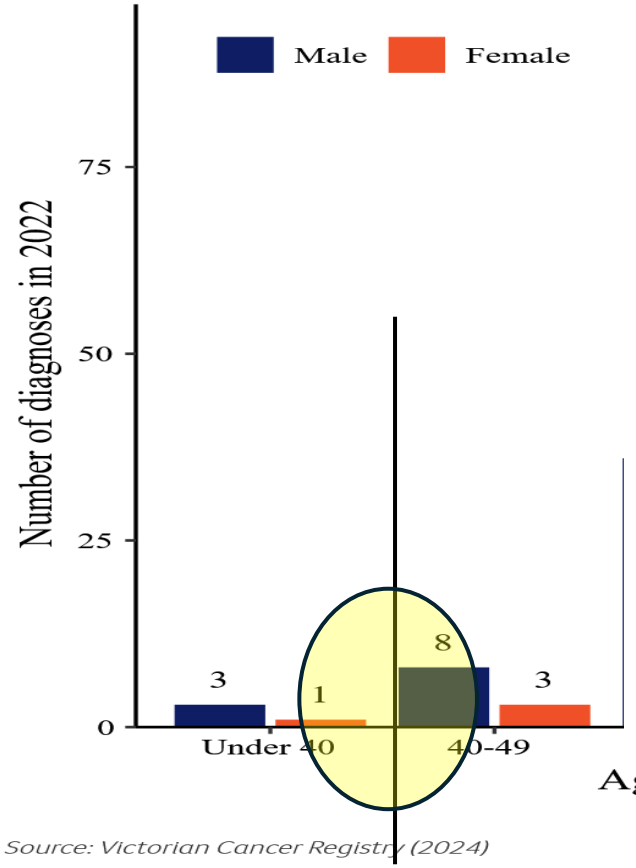


Fig. 5.—Graph showing death rates from cancer (all sites) by smoking history and by age.

Victorian oesophageal cancer diagnosis



Source: Victorian Cancer Registry (2024)

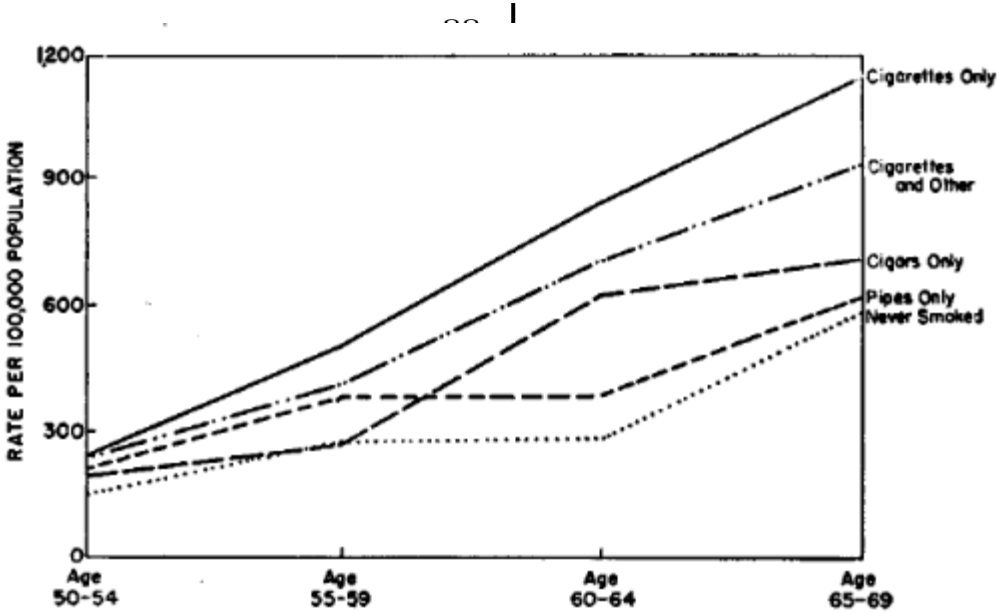
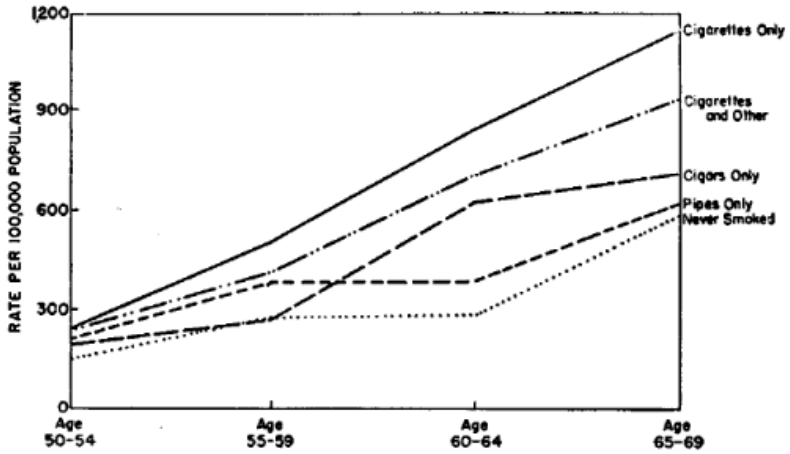


Fig. 5.—Graph showing death rates from cancer (all sites) by smoking history and by age.

The glove associating oesophageal cancer and bariatric surgery does not fit



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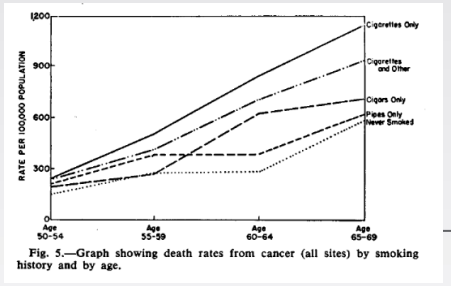
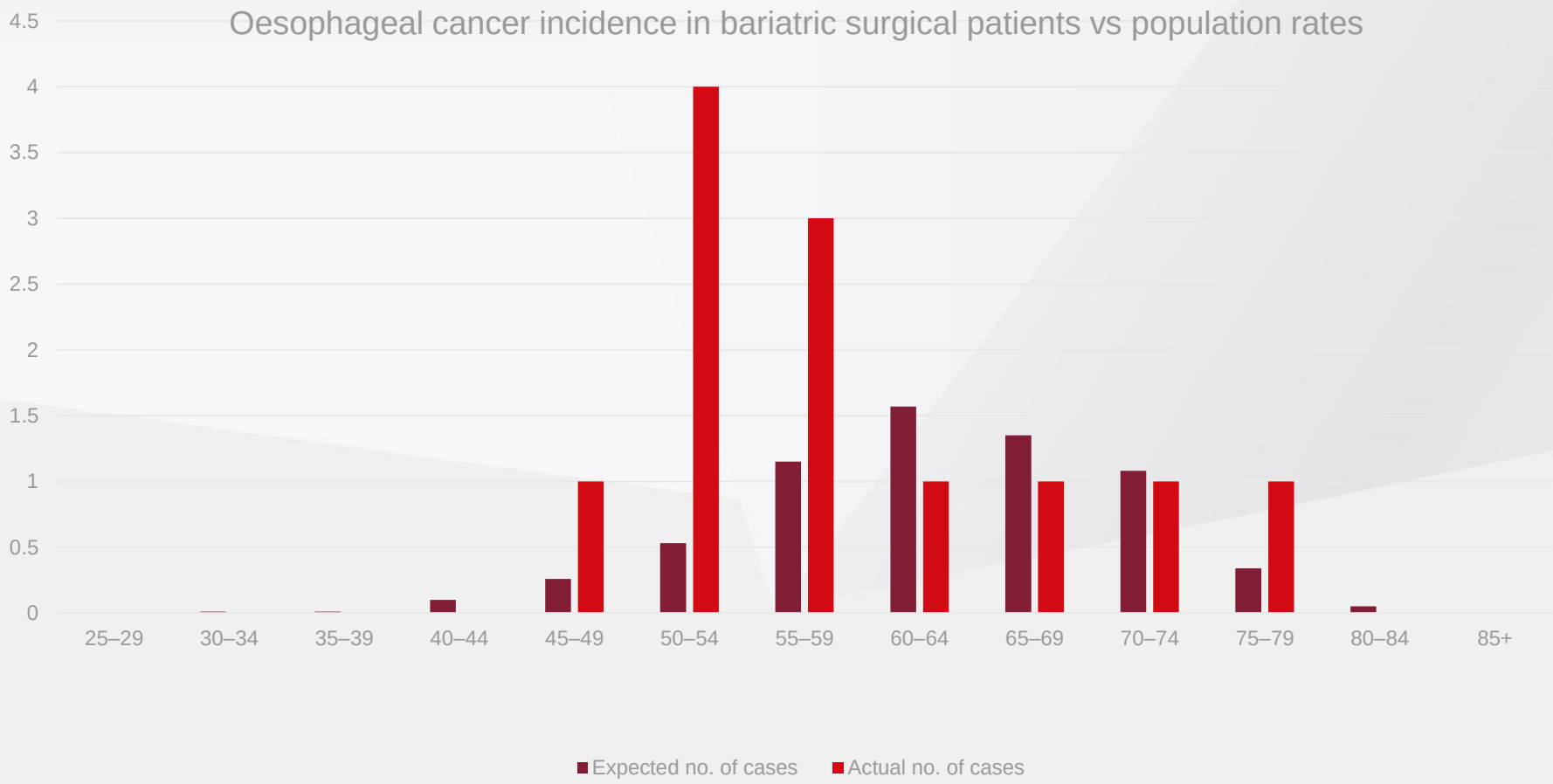


Fig. 5.—Graph showing death rates from cancer (all sites) by smoking history and by age.

20 year cohort study of 11,595 patients



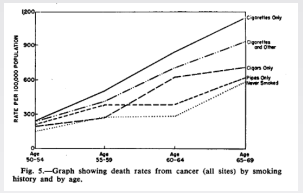
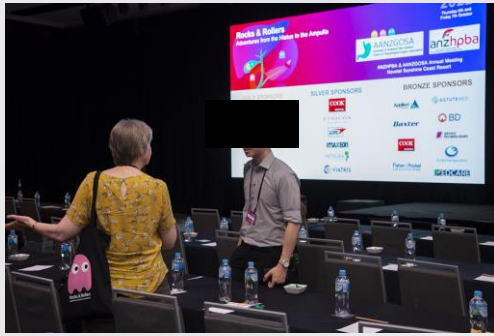
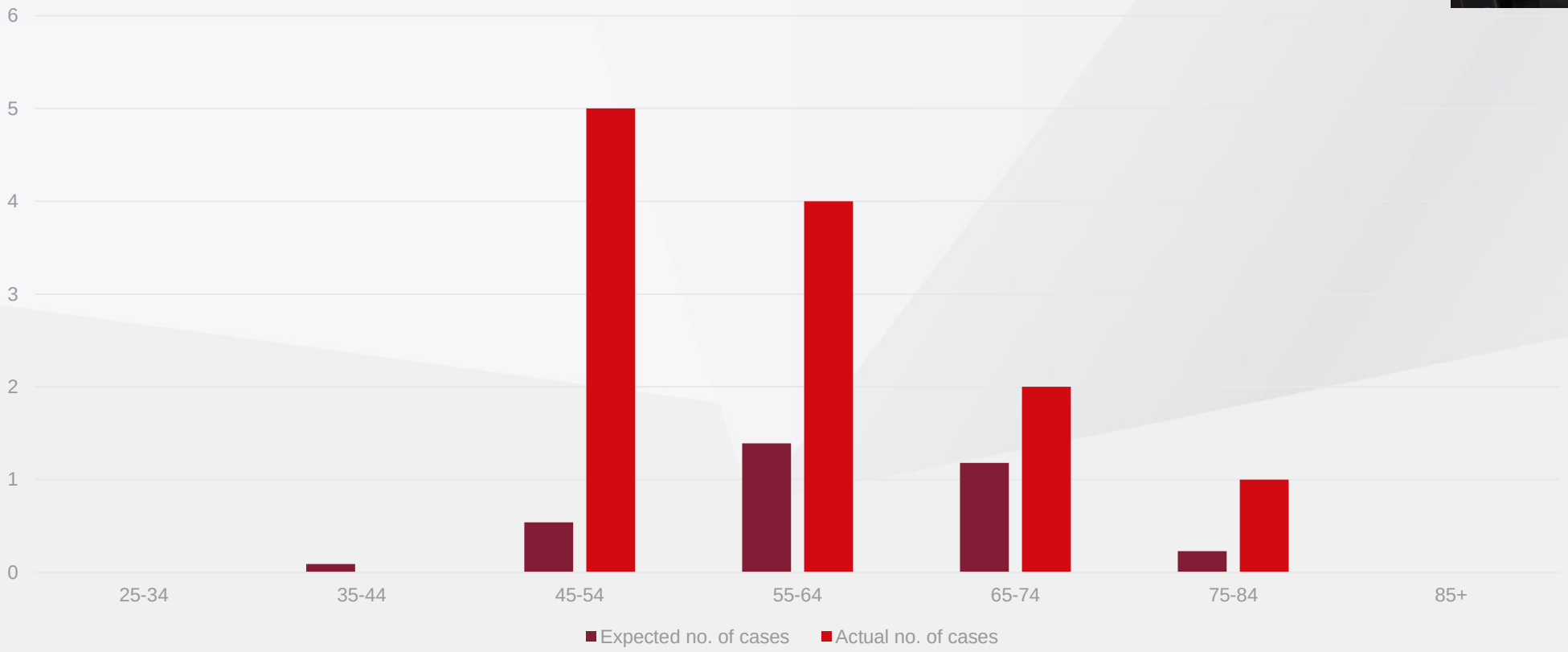


Fig. 5.—Graph showing death rates from cancer (all sites) by smoking history and by age.

20 Year outcomes of oesophageal carcinoma following bariatric surgery



Oesophageal adenocarcinoma in bariatric surgical patients compared to population with obesity



SIR = 12/1.79 = 6.70 (95% CI: 3.46 – 11.71)

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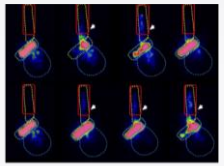
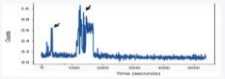
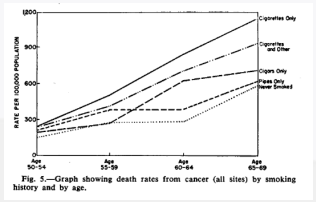




1. MECHANISM

2. OWN GOAL

3. The Glove



4. INVESTIGATION