

Background

- Biliary complications such as choledocholithiasis, cholangitis, gallstone acute pancreatitis, and acute cholecystitis pose a unique treatment challenge in Roux-en-Y gastric bypass (RYGB) patients
- Incidence of cholecystectomy and ERCP in RYGB patients is unclear

Methods

- Retrospective cohort study utilizing IBM Explorys database
- Identified patients with a history of RYGB and excluded patients with a history of cholecystectomy
- Determined new onset biliary complications at least 30 days after RYGB occurrence
- Of patients with biliary complications, identified patients who underwent cholecystectomy or ERCP post-RYGB
- Reviewed demographics and comorbidities of identified patient cohorts
- Logistic regression models were constructed

Aim

- To determine the incidence of biliary complications and need for cholecystectomy in RYGB patients

Results

Table 1: Biliary Complications After RYGB

Variables	Biliary Complications (N=930)	No Biliary Complications (N=8,560)	OR	95% CI
Adults (18-65)	630 (68%)	6100 (71%)	1.00	---
Elderly (>65)	300 (32%)	2460 (29%)	1.18	1.02-1.37
Male	190 (20%)	1890 (22%)	1.00	---
Female	740 (80%)	6650 (78%)	1.11	0.94-1.31
Caucasian	800 (86%)	6640 (78%)	1.00	---
African American	130 (14%)	1390 (16%)	0.78	0.64-0.94
Diabetes	390 (42%)	2400 (28%)	1.85	1.61-2.13
Hyperlipidemia	520 (56%)	3300 (39%)	2.02	1.76-2.32
Cardiovascular disease	160 (17%)	1400 (16%)	0.93	0.78-1.12

Table 2: Cholecystectomy After RYGB

Variables	Cholecystectomy (N=370)	No Cholecystectomy (N=560)	OR	95% CI
Adults (18-65)	260 (70%)	370 (66%)	1.00	---
Elderly (>65)	110 (30%)	190 (34%)	0.82	0.62-1.09
Female	300 (81%)	440 (79%)	1.17	0.84-1.62
African American	30 (8%)	100 (18%)	0.45	0.29-0.69
Diabetes	110 (30%)	280 (50%)	0.42	0.32-0.56
Cardiovascular disease	50 (14%)	110 (20%)	0.64	0.44-0.92

Conclusion

- ✓ Among RYGB patients, nearly 10% of patients developed new onset biliary complications
 - ✓ 40% required cholecystectomy and 2% required ERCP post-RYGB
- ✓ Risk factors for biliary complications included elderly age, Caucasian race, and history of diabetes and hypertension
- ✓ Further studies needed to investigate if cholecystectomy is recommended concurrently with Roux-en-Y gastric bypass