

INFLUENCE OF BARRETT'S ESOPHAGUS ON METABOLIC AND BARIATRIC SURGERY SELECTION AND OUTCOMES

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Background

- Obesity is a risk factor for gastroesophageal reflux disease (GERD), which in turn, increases the risk of Barrett's esophagus.
- The presence of Barrett's can influence the selection of bariatric procedures, as it is considered a relative contraindication to sleeve gastrectomy (SG).
- This study evaluates the prevalence of Barrett's in patients undergoing MBS, its impact on surgical decision-making, and associated clinical outcomes. We compare demographic and clinical characteristics of patients with and without Barrett's who underwent MBS.

Table 1

Demographic and clinical characteristics of patients hospitalized for MBS, by Barretts							p-value
	No		Barretts		Total		
	N	%	N	%	N	%	
Number of admissions	1,218,749	100.0	9,030	100.0	1,227,779	100.0	
Year of admission							
2016	163,340	13.4	1,000	11.1	164,340	13.4	
2017	174,455	14.3	975	10.8	175,430	14.3	
2018	179,035	14.7	1,355	15.0	180,390	14.7	
2019	178,205	14.6	1,475	16.3	179,680	14.6	
2020	147,840	12.1	1,255	13.9	149,095	12.1	
2021	181,120	14.9	1,600	17.7	182,720	14.9	
2022	194,755	16.0	1,370	15.2	196,125	16.0	
Patient age at admission, by decade							
<20	8,045	0.7	5	0.1	8,050	0.7	
20-29	140,405	11.5	250	2.8	140,655	11.5	
30-39	325,565	26.7	1,140	12.6	326,705	26.6	
40-49	351,910	28.9	2,500	27.7	354,410	28.9	
50-59	259,785	21.3	3,045	33.7	262,830	21.4	
60-69	117,405	9.6	1,805	20.0	119,210	9.7	
70-79	15,555	1.3	285	3.2	15,840	1.3	
80-89	80	0.0			80	0.0	
BMI							
20-24.9	100	0.0			100	0.0	
25-29.9	515	0.0	10	0.1	525	0.0	
30-34.9	13,195	1.1	145	1.6	13,340	1.1	
35-39.9	89,055	7.3	965	10.7	90,020	7.3	
40-44.9	389,985	32.0	2,825	31.3	392,810	32.0	
45-49.9	254,970	20.9	1,860	20.6	256,830	20.9	
50-59.9	221,735	18.2	1,395	15.4	223,130	18.2	
60-69.9	51,450	4.2	140	1.6	51,590	4.2	
>=70	13,035	1.1	30	0.3	13,065	1.1	
NA	184,710	15.2	1,660	18.4	186,370	15.2	
Patient sex							
Male	232,115	19.0	2,565	28.4	234,680	19.1	
Female	986,420	81.0	6,465	71.6	992,885	80.9	
Procedure							
LSG	879,659	72.2	2,300	25.5	881,959	71.8	
RYGB	339,090	27.8	6,730	74.5	345,820	28.2	
LOS							
Mean, SD	1.6	1.8	1.8	1.6	1.6	1.8	
Median, IQR	1.0	1.0	2.0	1.0	1.0	1.0	
Age							
Mean, SD	43.8	12.0	51.1	10.8	43.9	12.0	
Median, IQR	43.0	17.0	52.0	16.0	43.0	17.0	
BMI							
Mean, SD	47.3	7.4	45.8	6.6	47.3	7.4	
Median, IQR	47.5	12.5	42.5	5.0	47.5	12.5	

Discussion

- As expected, patients with Barrett's had a higher rate of GERD and hiatal hernia, and were more likely to undergo concurrent hiatal hernia repair.
- They also experienced longer hospital stays.
- While most patients with Barrett's underwent RYGB, a notable subset (27.8%) underwent SG, with nearly half of these also undergoing a concomitant hiatal hernia repair.

Methods

- Patients underwent SG or Roux-en-Y gastric bypass (RYGB) in the HCUP National Inpatient Sample data (2016–2022).
- The subset of patients with Barrett's was identified, and demographic and clinical characteristics were compared.

Conclusion

- The presence of Barrett's influences surgical selection in MBS, with a clear preference for RYGB over SG. Nonetheless, a subset of patients still undergo SG, often with concurrent hiatal hernia repair. Future studies should explore the clinical rationale behind procedure selection and long-term outcomes in this population.