

INTRODUCTION

- Functional heartburn (FH) and reflux hypersensitivity (RH) are two functional esophageal disorders that involve dysfunction of the gut-brain axis.
- Psychiatric disorders were previously reported to be associated with GERD, including anxiety and depression.
- Association of neuropsychiatric disorders with FH and RH remains scarce.

AIM

- Compare the distribution of psychiatric diseases among FH, RH and refractory GERD populations.

METHOD

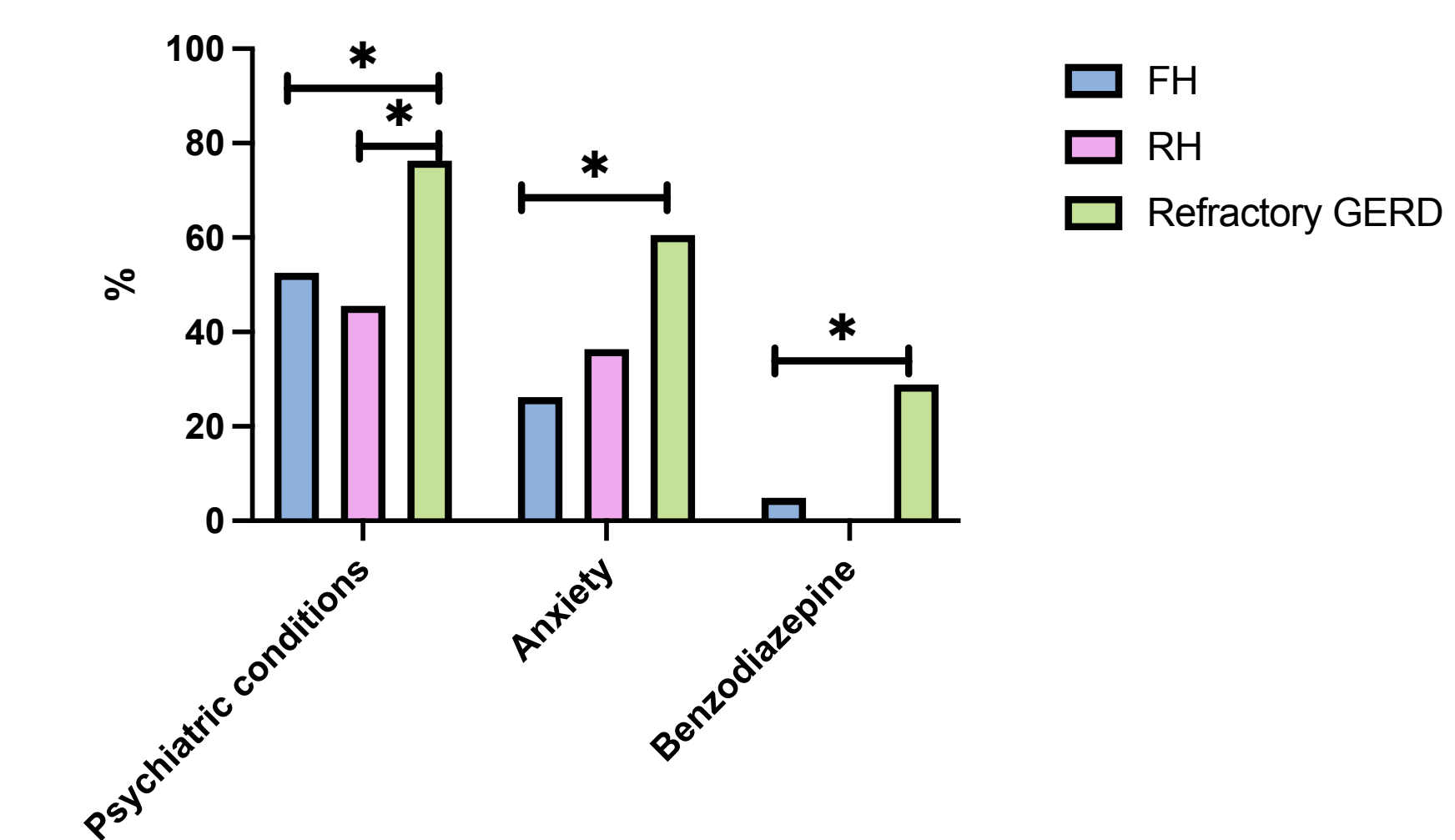
- 774 Patients were identified through Epic SlicerDicer and retrospective chart review was performed
- Selection criteria: Diagnosed with GERD, taking PPIs and received esophageal pH monitoring from Jan 2001 to Oct 2021.
- FH patients: Negative esophageal pH monitor while off PPI, lack of endoscopic evidence of mucosal injury or major motility issues.
- RH patients: Positive symptom association with acid reflux, negative esophageal pH monitor while off PPI, lack of endoscopic evidence of mucosal injury or major motility issues.
- Refractory GERD patients: positive pH test while on twice daily PPI.
- Demographic information, psychiatric history, and medications were collected
- Data were analysed using ANOVA, Fisher's exact test and chi-square test.
- Odds ratio (OR) at 95% confidence interval was reported.

RESULTS

- FH group consists of 61 patients, RH group consists of 22 patients, and refractory GERD group consists of 38 patients.
- There was a significant difference in the prevalence of psychiatric conditions overall and anxiety among FH, RH and refractory GERD group.
- Both FH and RH had an lower prevalence of psychiatric conditions when compared with refractory GERD group (FH vs refractory GERD: OR 0.139-0.843, p=0.018; RH vs refractory GERD: OR 0.084-0.796, p=0.016)
- There was a lower prevalence of anxiety and use of benzodiazepines in FH as compared with the refractory GERD group (Anxiety in FH vs refractory GERD: OR 0.098-0.551, p<0.001; Benzo in FH vs refractory GERD: OR 0.033-0.493, p<0.001).

	FH (n=61)	RH (n=22)	Refractory GERD (n=38)	p	
Age	56.0±1.9	53.3±2.7	57.2±2.3	0.58	
BMI	29.1±1.0	30.2±1.5	31.7±1.1	0.27	
Gender	Male	3 (13.6%)	8 (21.1%)	0.77	
	Female	49 (80.3%)	19 (86.4%)	30 (78.9%)	
Psych	Overall psychiatric conditions	32 (52.5%)	10 (45.5%)	29 (76.3%)	0.02
	Anxiety	16 (26.2%)	8 (36.4%)	23 (60.5%)	0.00
	Depression	25 (41.0%)	8 (36.4%)	22 (57.9%)	0.17
	Schizophrenia	3 (4.9%)	0	1 (2.6%)	0.52
	PTSD	3 (4.9%)	2 (36.4%)	4 (10.5%)	0.56
	Bipolar	3 (4.9%)	0	2 (5.3%)	0.56
Medications	SSRI	13 (21.3%)	4 (18.2%)	14 (36.8%)	0.15
	SNRI	3 (4.9%)	2 (9.1%)	6 (15.8%)	0.19
	TCA	6 (10.0%)	2 (9.1%)	3 (7.9%)	0.94
	Benzodiazepine	3 (4.9%)	0	11 (28.9%)	<0.001

Figure 1 Psychiatric conditions and medications in FH, RH and refractory GERD



CONCLUSIONS

- Our study found a lower prevalence of psychiatric disorders and anxiety in the functional esophageal groups as compared with refractory GERD group.
- Further studies are warranted to determine the neuropsychiatric differences across different phenotypes of GERD.

REFERENCES

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