

### BACKGROUND

Gastroesophageal reflux disease (GORD) is a common contributor towards chronic cough and is often asymptomatic.

Current European Respiratory Society (ERS) guidelines advocate trialling acid suppression in symptomatic cases only yet controversially asymptomatic patients may also report therapeutic benefit [1].

Further studies are required to understand the efficacy of this intervention in both groups to reduce the economic cost of empirical anti-acid prescriptions and address the disparity in clinical practice.

### METHODS

We conducted a retrospective observational study of all referrals to respiratory outpatients with chronic cough over a 6 month period (January-June 2019).

The proportion of patients who had already been trialled on anti-acids in primary care was evaluated.

Subsequent analyses of clinic letters and investigations allowed us to assess the prevalence of GORD and associated benefit of acid suppression in symptomatic vs asymptomatic patients.

### RESULTS

A total of 50 patients with chronic cough were reviewed. The mean age was 63 years with 60% of the cohort being female (n=30).

42% (n=21) of patients had been empirically trialled on anti-acids by the GP previously independent of symptoms but the dose +/- length of treatment was suboptimal.

60% (n= 30) of patients had a clear alternative diagnosis and were not offered an anti-acid trial in respiratory clinic. Out of these 10% (n=3) had GORD coexisting with an alternative cause of chronic cough deemed to be the underlying pathology.

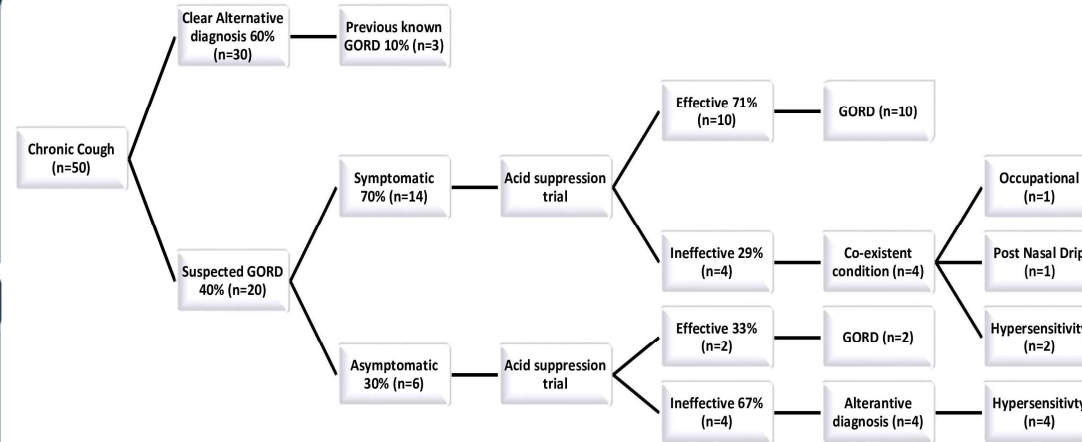
40% (n=20) of patients suspected to have GORD underwent an anti-acid trial with efficacy of 71% (n=10) in symptomatic patients and 33% (n=2) in asymptomatic patients. Co-existent disease with an alternative diagnosis was seen in 29% (n=4) of symptomatic patients and 67%(n=4) of asymptomatic patients [Figure.1]

### DISCUSSION

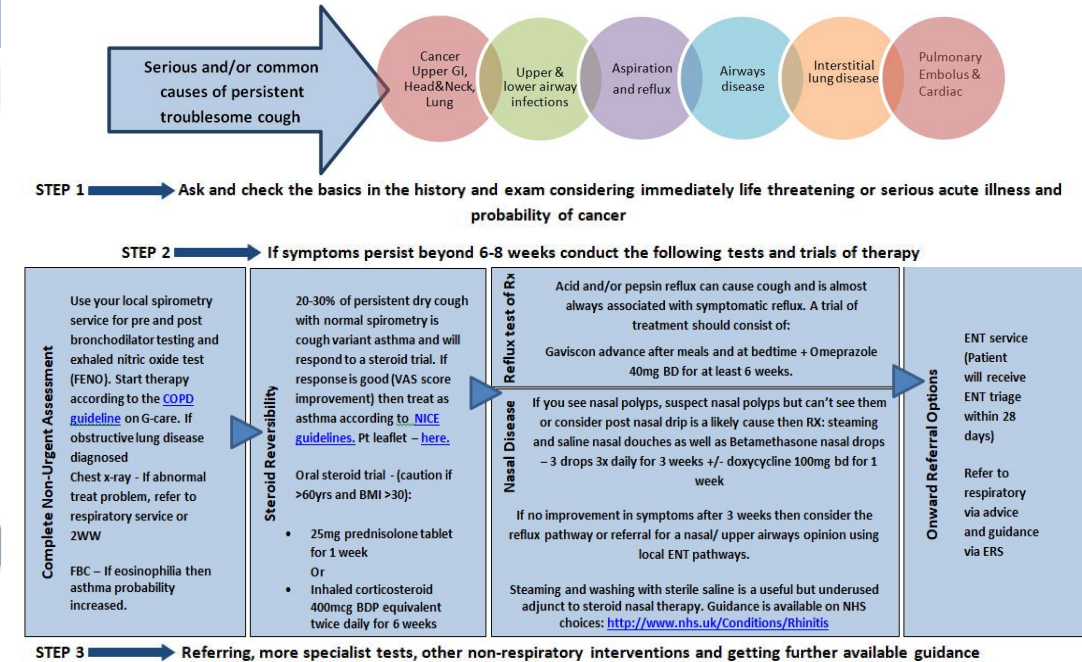
Co-existence of chronic cough and GORD is well established and may explain the inefficacy of treatment reported by patients on a trial of anti-acids alone. Similarly in asymptomatic patients it is difficult to determine if the benefit is truly due to suppression of GORD versus placebo effect.

Further research, clinical judgement and a multidisciplinary systemic approach to diagnosis and management of chronic cough starting from primary care is vital to better define this association as being implemented in our trust [Figure. 2]

**Figure 1. Efficacy of Acid Suppression In Suspected Gastroesophageal Reflux**



**Figure 2. Persistent & Chronic Cough - A Systematic Approach To Diagnosis**



### REFERENCES

[1] Morice, A. H. et al, ERS Guidelines on the diagnosis and treatment of chronic cough in adults and children, *European Respiratory Journal*(2020;55:1901136