Updates to the Modern Diagnosis of GERD: Lyon Consensus 2.0

By Jason Nasser, MD

Modern Definition of GERD

1) Conclusive evidence on endoscopy and/or pH testing
2) In the presence of compatible troublesome symptoms

Actionable GERD → settings where management requires long-term acid suppression, escalation of medical management, or consideration of interventional options

Testing strategies differ for unproven vs. proven GERD

Symptoms of GERD

High likelihood, typical symptoms include
→ heartburn, regurgitation, and esophageal chest pain

Variable relationship atypical symptoms include
→ belching and chronic cough/asthma

Low likelihood atypical symptoms include
→ hoarseness, globus, nausea, abdominal pain, and dyspepsia

For variable and low likelihood symptoms, consider testing rather than empiric treatment, per available resources

Endoscopic Diagnosis

Conclusive evidence for GERD:
- LA grades B, C, D esophagitis
- Biopsy-proven Barrett's esophagus
- Peptic stricture

To maximize yield, perform 2-4 weeks after PPI discontinuation in unproven GERD

Evidence of refractory GERD: LA grades B, C, D or recurrent peptic stricture while on optimized PPI therapy

Ambulatory Reflux Monitoring

Preferred test for unproven GERD
→ prolonged wireless pH monitoring off PPI

Highest diagnostic yield with 96-hour studies (compared to 24-to-48-hour studies)

pH-impedance testing off PPI → Valuable for belching, concern for rumination, and for pulmonary symptoms

pH-impedance testing on PPI → Valuable in proven GERD with persistent symptoms on optimal therapy

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Key Diagnostic Thresholds

Conclusive evidence for GERD:
- AET >6% on 24-hour studies or ≥2 days on wireless studies

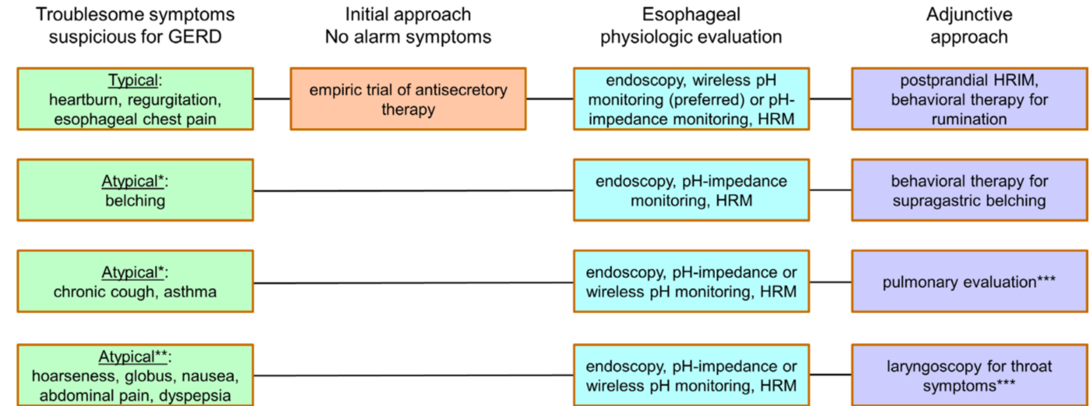
Evidence excluding GERD:
- AET <4% each day with negative reflux-symptom association

Refractory GERD on PPI therapy:
- AET >4% and >80 reflux episodes per day on optimized antisecretory regimen

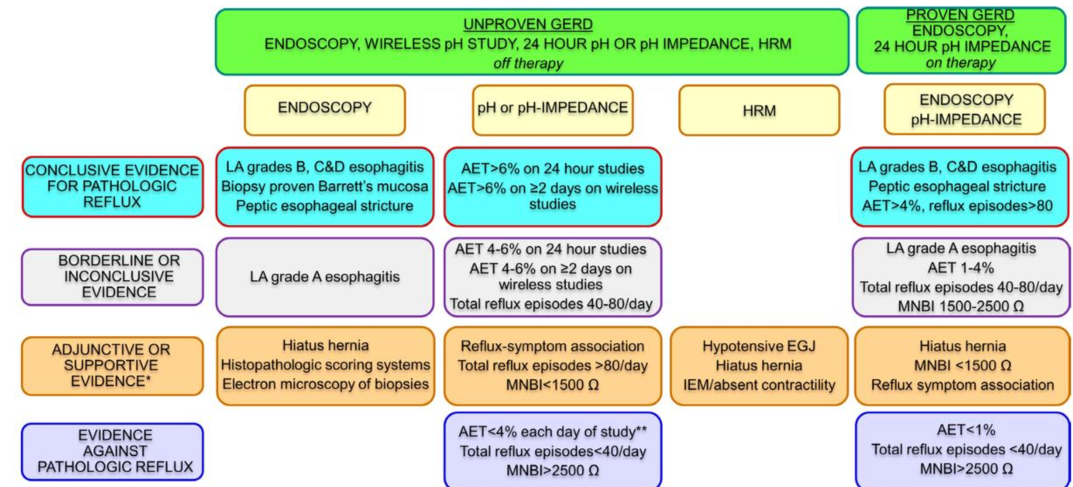
Adjunctive evidence supporting GERD:
- Total reflux episodes >80/day (vs <40)
- MNBI <1500 Ω (vs >2500)
- Positive reflux-symptom association
- Hiatal hernia, hypotensive EGJ, and IEM

Reflux Hypersensitivity:
- AET <4% all days with positive reflux-symptom association

AET: Acid exposure time
MNBI: Mean nocturnal baseline impedance
EGJ: Esophagogastric junction
IEM: Ineffective esophageal motility



* likelihood of GERD is lower than with typical symptoms, testing is performed to identify or rule out a reflux basis for symptoms
** likelihood of GERD is very low, upfront testing is typically not recommended except to rule out a reflux basis for symptoms
***adjunctive approaches may precede esophageal evaluation to rule out primary pulmonary and laryngeal disorders



* factors that increase confidence for presence of pathologic reflux when evidence is otherwise borderline or inconclusive
** wireless pH monitoring: <4% on all days; pH-impedance: all criteria should be met.

Gyawali CP, Yadlapati R, Fass R, et al. Updates to the modern diagnosis of GERD: Lyon consensus 2.0. Gut. 2024 Jan 5;73(2):361-371.