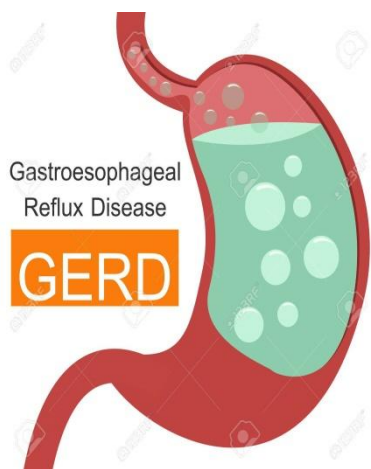


JSC “Astana Medical University”
Department of Internal Diseases № 1

SIW

THEME:

*“GASTROESOPHAGEAL
REFLUX DISEASE”*



Checked by: Baidurin S.A

Done by: Suleymenova D. 463GM.

Astana 2018y.

Definition of GERD (by WHO)

It is a chronic relapsing disease which characterized by inflammatory damage to the distal esophagus due to repeated throws into it of gastric and / or duodenal contents.



Epidemiology

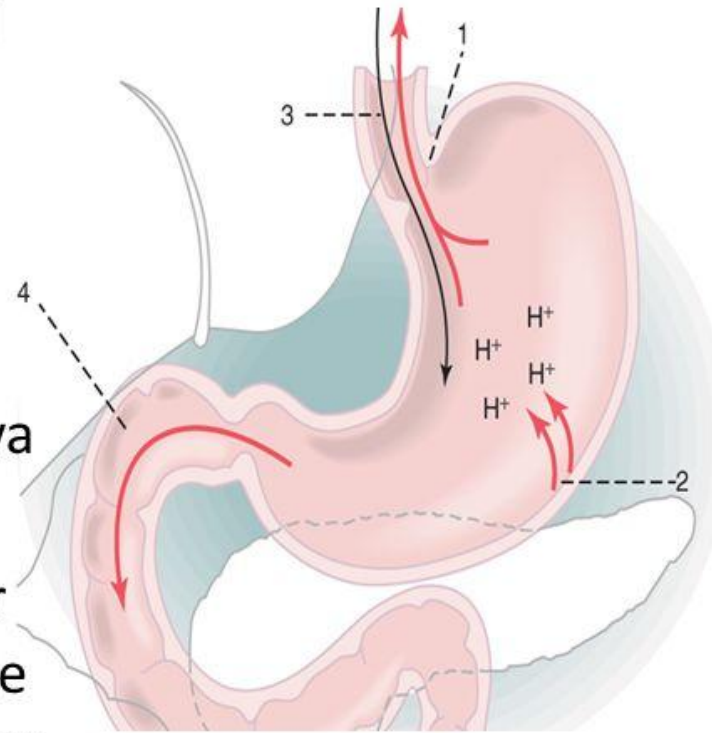
GERD is a global disease, and evidence suggests that its prevalence is increasing. Prevalence estimates show considerable geographic variation, but it is only in East Asia that prevalence estimates are currently consistently lower than 10%. The high prevalence of GERD, and hence of troublesome symptoms, has significant societal consequences, impacting adversely on work productivity and many other quality- of-life aspects for individual patients.

Factors contributing development of gastroesophageal reflux disease (GERD)

- Failure of antireflux barrier
- Reduced motor-evacuation function of the stomachIncreased
- intra-abdominal pressure
- Reduction of esophageal clearance
- Reduced resistance of the esophageal mucosa
- Inflammatory-erosive-ulcerative diseases of the gastroduodenal zone

Pathogenesis of GERD

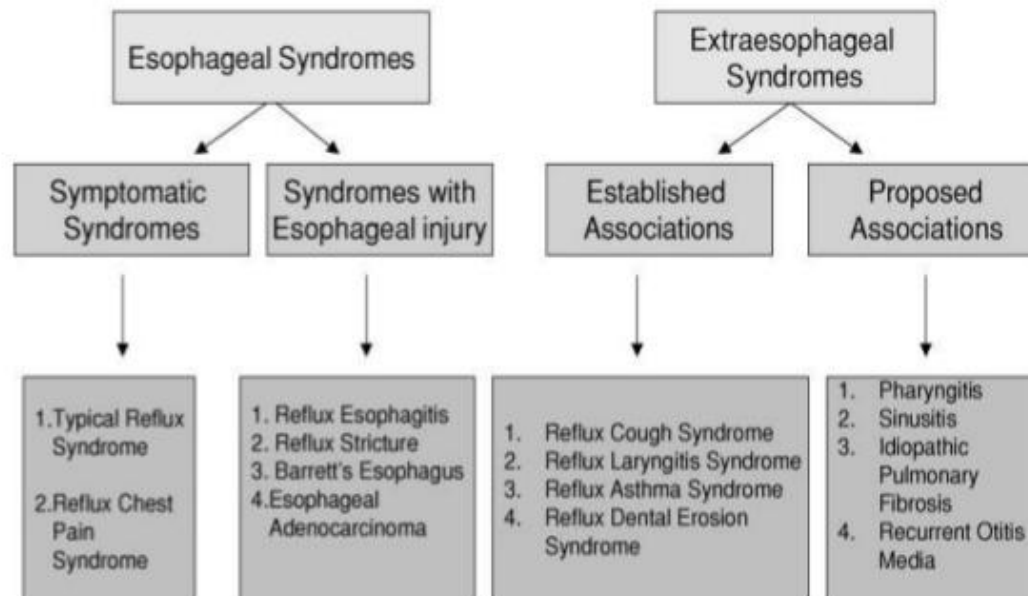
1. impaired lower esophageal sphincter
2. hypersecretion of acid
3. decreased acid clearance resulting from impaired peristalsis or abnormal saliva production
4. delayed gastric emptying or duodenogastric reflux of bile salts and pancreatic enzymes.



Clinical symptoms

Montreal Classification of GERD

GERD is a condition which develops when the reflux of gastric content causes troublesome symptoms or complications

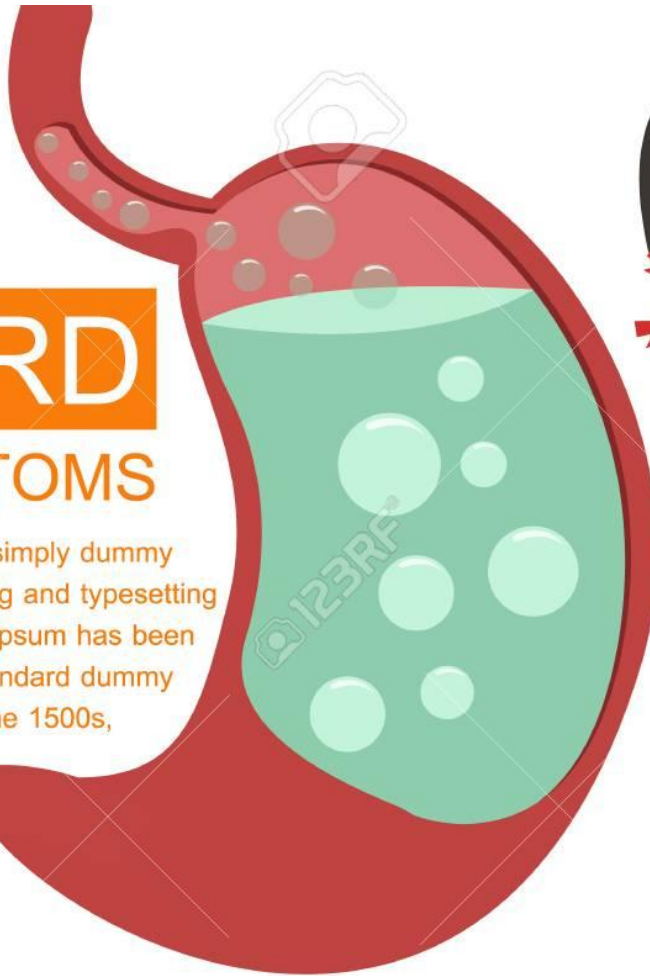


From Vakil N et al. Am J Gastroenterol 2006;101:1900-20.

Clinical symptoms

GERD SYMPTOMS

Lorem Ipsum is simply dummy text of the printing and typesetting industry. Lorem Ipsum has been the industry's standard dummy text ever since the 1500s,



HEARTBURN



BELCHING



FLATULENCE



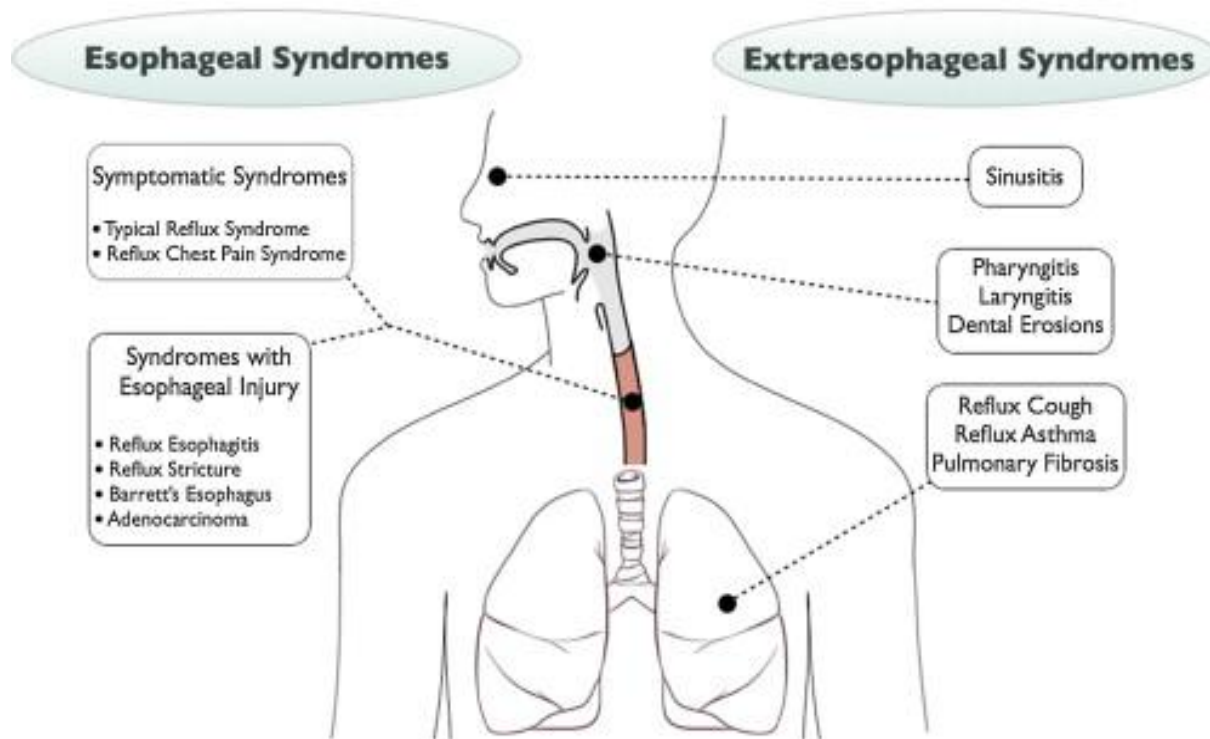
VOMITING



DIFFICULTY
SWALLOWING

The main extraesophageal manifestations of GERD

GERD is a condition that develops when reflux of stomach contents causes troublesome symptoms and/or complications



- Bronchopulmonary syndrome
- ENT syndrome
- Dental syndrome
- Anemic syndrome
- Cardiac syndrome

Bronchopulmonary syndrome

- Chronic cough
- Paroxysmal sleep
- apnea
- Bouts of paroxysmal cough
- Reflux-induced asthma
- COPD
- Less often-the development of bronchiectasis, aspiration pneumonia, lung abscesses, idiopathic pulmonary fibrosis, hemoptysis, lung atelectasis.

Otolaryngological syndrome

- inflammation of the nasopharynx
- Pharyngitis, laryngitis, laryngeal croup
- Ulcers, granulomas, and polyps of the vocal folds
- Stenosis of the larynx
- Larynx cancer
- Rhinitis

Anemic syndrome

Manifested by the development of posthemorrhagic hypochromic iron-deficiency anemia. Occurs due to chronic bleeding from erosion and / or ulcers of the esophagus.

Cardiac syndrome

- Chest pain simulating angina
- Arrhythmias and cardiac conduction
- Myocardial ischemia
- Reflex angina
- Blood pressure rises.

GERD Diagnosis



physical exam



**symptoms
evaluation**

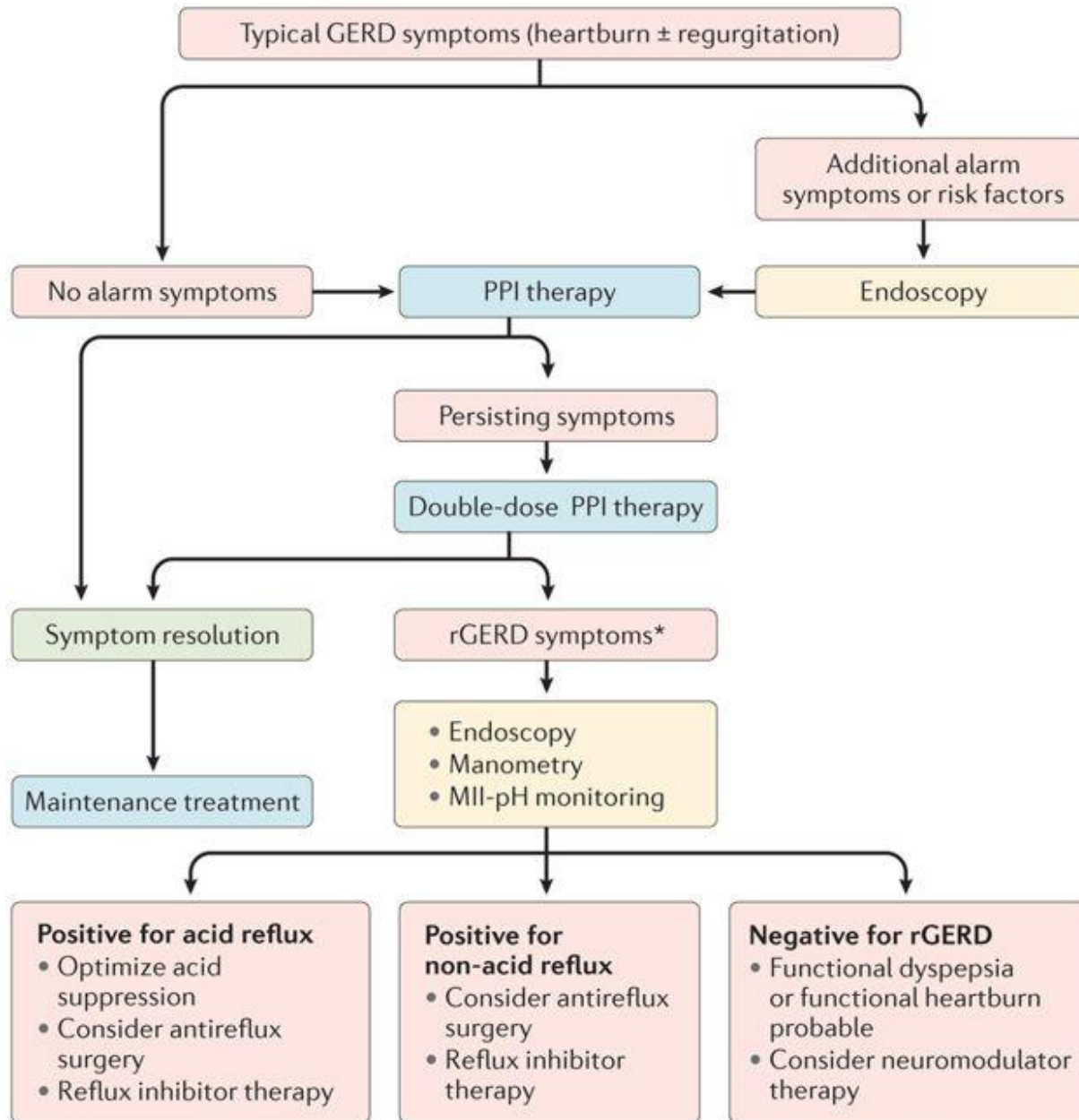


upper endoscopy



**esophageal
manometry**





DIAGNOSING (TESTS)

- ✓ Gastroscopy
- ✓ Manometry
- ✓ Radiology
- ✓ Alkaline test
- ✓ Histology



Метод исследования	Возможности метода
Гастроскопия	Воспаление пищевода, эрозии, язвы, стриктуры, пищевод Баррета
Суточная рН-метрия	Количество и продолжительность эпизодов рН (эпизоды, при которых рН в пищеводе опускается ниже 4,0 ед. ГЭР имеет место и у здоровых людей, однако продолжительность рефлюкса не должна превышать 5 минут, а суммарное понижение рН до 4 ед. и ниже не должно превышать 4,5% от всего времени записи)
Манометрия	Позволяет определить давление НПС (в норме давление в области НПС составляет 10-30 мм.рт.ст, при ГЭРБ <10)
Рентген	Грыжа ПОД, язвы, стриктуры пищевода, эзофагеальный рефлюкс
Щелочной тест	Быстрое купирование симптомов ГЭРБ при приеме всасывающих антацидов
Тест с ИПП	Прием ИПП купирует симптомы ГЭРБ
Гистология	«Золотой стандарт» диагностики ГЭРБ - 100% верификация диагноза

Classification of GERD was done according to Savary-Miller
(1978)

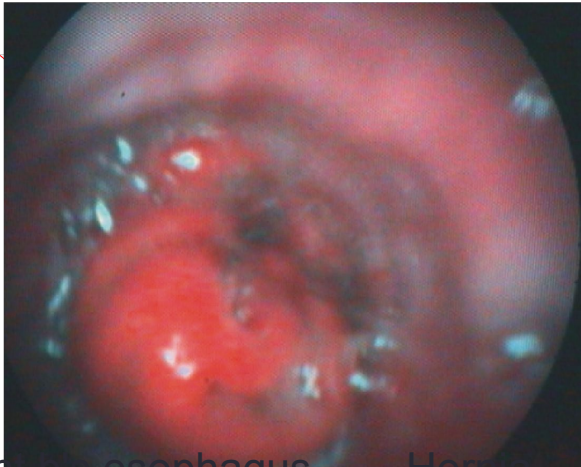
0 stage	GERD without esophagitis (endoscopically negative)
1 stage	Individual non-merging erosion and / or erythema of the distal esophagus
2 stage	Merging, but not capturing the entire surface of the mucous erosion
3 stage	Ulcerative lesions of n / 3 esophagus, merging and covering the entire surface of the esophagus
4 stage	Chronic ulcer of the esophagus, stenosis, Barrett's esophagus (cylindrical metaplasia of the esophagus mucosa)



From the esophagus of patient A.
Hernia, catarrhal esophagitis.



the esophagus of the patient L.
Chronic erosive esophagitis.



• Patient D's esophagus. Hernia,
catarrhal esophagitis.



stomach patient L.
Chronic reflux-gastritis

TREATMENT

- ❖ I stage. Lifestyle change
- ❖ Stage II. Medicamental antireflux therapy
- ❖ Stage III. Supporting therapy

Lifestyle changing

- Fight against overweight
- Fractional power
- Walking for 30 minutes after meals
- Don't lie down after eating, after (1-1,5 hours)
- Sleep with the head end of the bed raised by 15 cm
- Do not eat before bedtime
- Do not wear tight clothes and tight belts
- Refusal of food reducing the tone of the NPS and enhancing gas formation (fatty foods, chocolate, onion, garlic, pepper, caffeine-containing and carbonated drinks, citrus, tomatoes)
- Refusal of alcohol
- Refusal of smoking. Weight loss) If possible, the refusal of drugs that reduce the tone of the NPS Avoid abdominal tension



Basic antisecretory drugs and their daily doses

- Inhibitors of the proton pump - the "gold standard" in the treatment
- Omeprazole (omez, omeprazole, losek, zerocide) 20 mg 2 times
- Lansoprazole 30 mg 2 times
- Pantoprazole (controloc) 40 mg 2 times
- Rabeprazol (pariet) 20 mg 2 times
- Esomeprazole (nexium) 40 mg 1 time/day

H2-blockers Ranitidine (zantac, ranisan) 150 mg 2 times
Famotidine (ulfamid, gastrosidin, peptide, leader, kvamatel) 20 and 40 mg 2 times
Nizatidine (axid) 150 mg 2 times
Roxatidine 150 mg 2 times

Alginates, aluminum-containing antacids

- Gaviscon 2-4 TB (carefully chew the tablets) or 10-20 ml suspension after a meal or n / a night (if gaviscon Forte take half the dose)
- Topalkan 2 tablets (carefully chew) or 1 bag 3 times a day before meals
- Almagel 5-10 ml suspension after meals and at night, Algeldrate / magnesium hydroxide 1-2 tablets, or 5-10 ml suspension
- Maalox 1-2 tablets or 1-2 bags after meals and at night Aluminium phosphate gel for 1-2 sachets after meals and at night
- Gastal 1-2 tablets after meals and at night,
- Gelusil-Lak 1 TB or 1 sachet after meals and at night.

•Gastroprotektors

- Misoprostol (cytotec), 200 mcg, 3 times a day immediately after meals and h/night,
- De Nol, 120 mg 1-1 hours before meals and at night
- Venter (sucralfate), 0.5-1G 3 times a day for 1-1 hours before eating and before bedtime

•Prokinetics

- 1. Itoprida hydrochloride (ganaton) inside 50 mg 3 times a day before meals.
- 2. Motilium (domperidone), inside 10 mg 3-4 times a day before meals or 30 mg in candles.

Complications of GERD

- ✓ Stricture of the esophagus (7-23%)
- ✓ Esophageal ulcers (5%)
- ✓ Bleeding from erosions and ulcers (2%)
- ✓ Barrett's Esophagus (8-20%)
- ✓ Esophagus cancer
Reflex stop of breathing, as a consequence of reflux and laryngeal spasm

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Thank YOU for attention!