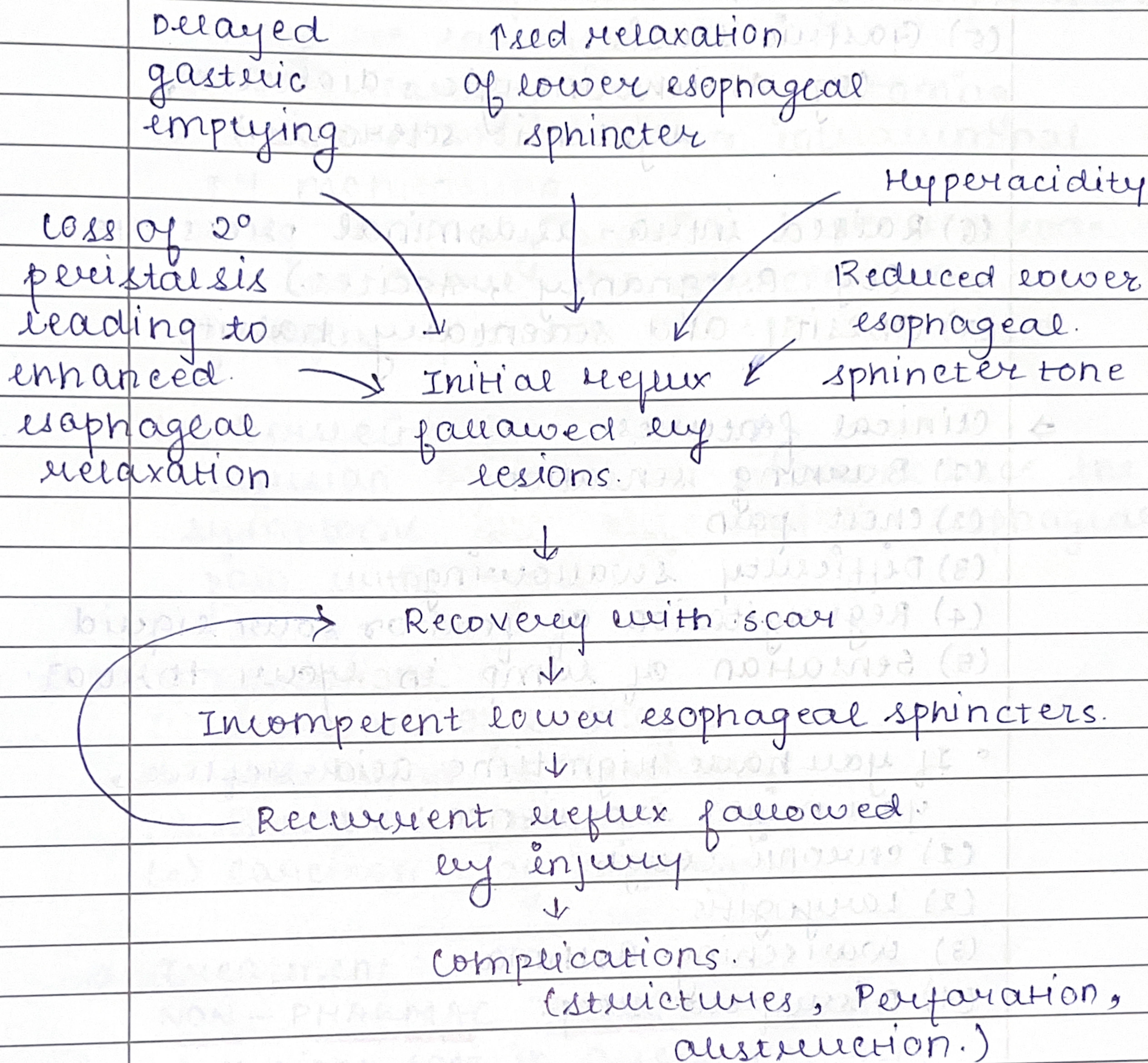


Gastro-esophageal reflux

"Reflex of gastric contents into the esophagus resulting in inflammation of esophagus caused by H^+ ions, pepsin and bile salts."



⇒ Risk factors:

- (1) Old age
- (2) Smoking
- (3) Fat, chocolate, coffee, alcohol.
- (4) Hiatus hernia.
- (5) Gastric stasis

(Eg: Anticholinergic, diabetes, systemic sclerosis.)

- (6) Raised intra-abdominal pressure

(Eg: Pregnancy, Ascites.)

- (7) Obesity and sedentary habits.

⇒ Clinical features:

- (1) Burning sensation
- (2) Chest pain
- (3) Difficulty swallowing
- (4) Regurgitation of food or sour liquid
- (5) Sensation of lump in your throat.

° If you have nighttime acid reflux, you might experience:

- (1) Chronic cough
- (2) Laryngitis
- (3) Worsening asthma
- (4) Disrupted sleep.

⇒ Diagnosis:

- (1) X-ray (Barium swallow test)
Barium drink is swallowed to check if reflux occurs.

(2) Endoscopy / Esophagoscopy - To find inflammation or ulceration of mucosa.

(3) CT-SCAN

(4) Manometry : The resting LOS pressure may be lowered.

(5) Ambulatory reflux monitoring

(6) A continuous 24-hr intraesophageal pH monitoring:

It is done by placing a pH electrode 5 cm above the sphincter. The no. of reflux episodes ($\text{pH} < 4$) are noted.

(7) Bernstein's test:

Infusion of N/10 HCl to reproduce the symptoms and differentiate esophageal pain with angina.

⇒ Complications:

(1) Stricture of esophagus.

(2) Ulceration of esophagus.

(3) Barrett's esophagus.

(4) Carcinoma of esophagus.

⇒ Treatment:

NON-PHARMAE THERAPY-

(1) Weight loss in obese patients.

(2) Consumption of smaller meals and

not sleeping for at least 3 hours after meals.

(3) Smoking cessation.

(4) Avoid alcohol.

(5) Avoid food and medications that exacerbate GERD.

(6) Avoid tight-fitting clothes.

(7) Elevate head-end of the bed. (↑ esophageal clearance)

PHARMAC THERAPY:

(1) Intermittent and Mild Heartburn.

⇒ Antacid + H₂RA or PPIs. + Lifestyle modification

Calcium carbonate	500mg 2 tabs	+	cimetidine (BD) 200mg or	OR	Omeprazole 20mg (OD) or
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Famotidine 10mg (BD)	OR	lansoprazole 15mg (OD)
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(2) Symptomatic relief of GERD

⇒ Lifestyle modifications + H₂RA or PPIs.

cimetidine (BD) 200mg or	OR	Omeprazole 20mg (OD) or
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Famotidine (BD) 10mg or	OR	lansoprazole 15mg (OD) or
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Ranitidine (BD) 150mg	OR	Pantoprazole 40mg (OD)
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(6-12 weeks)

(4-8 weeks)

(3) Healing of highly erosive esophagitis
 ⇒ Lifestyle modifications + PPI or H₂RA (high dose)

Cimetidine

800mg (BD)

or

Famotidine

40mg (BD)

or

Ranitidine

150mg (QID)

(8-12 week)

Omeprazole

20mg (BD)

or

Lansoprazole

15mg (BD)

or

Pantoprazole

40mg (BD)

(4-16 weeks)

(4) Interventional therapy: Antireflux surgery.