

Revision after ESG

Challenges encountered

Khaled Hamdan

Consultant Bariatric and UGI Surgeon



The procedure



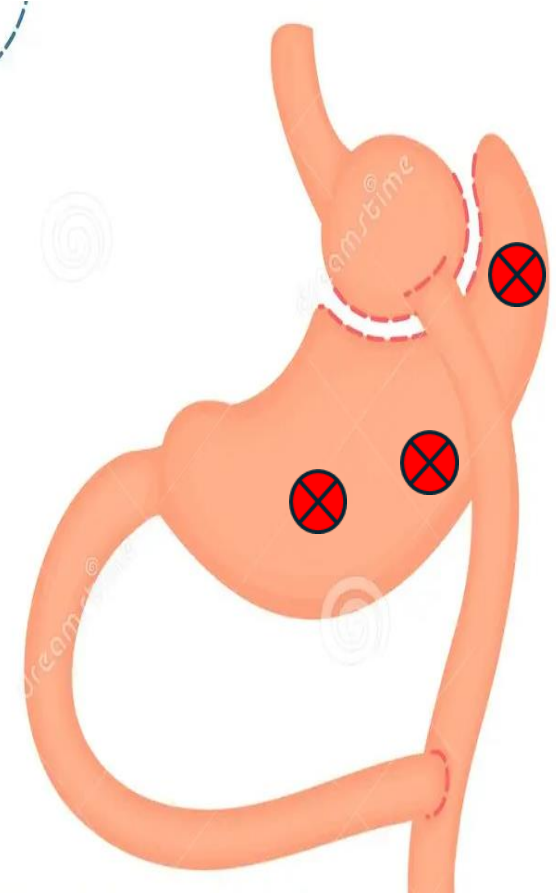
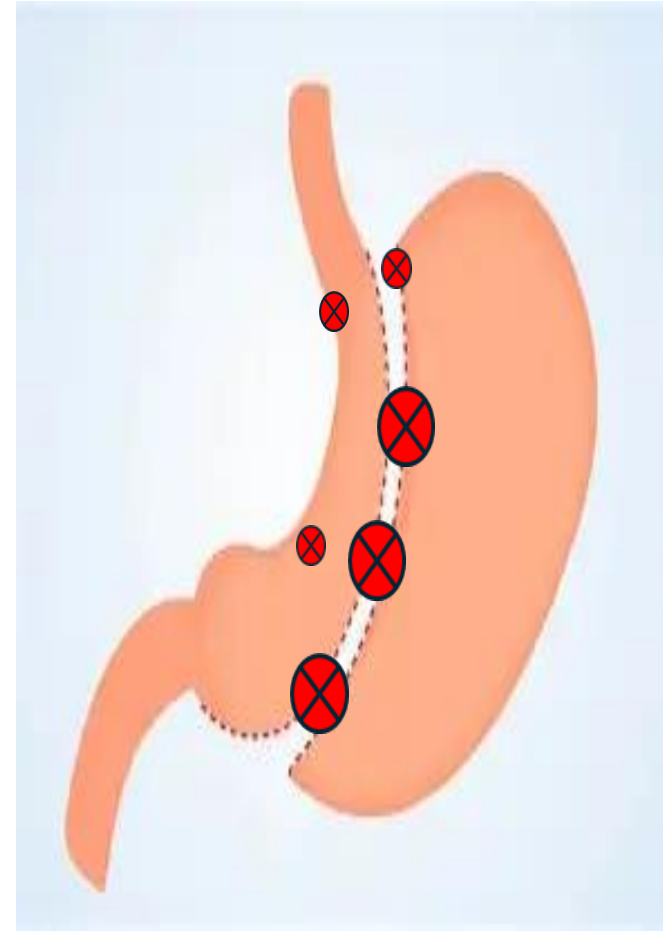
Endoscopic
Sleeve Gastroplasty

Potential advantages

- Less invasive –lower complications rate
- Short hospital stay, early return to work
- Good weight loss results -20% TWL
- Less nutritional problems
- Reversible
- Anatomy is preserved
 - All surgical options are possible

Challenges encountered in over 12 cases

- Suture material and anchors
 - In the way of staple line – staple misfiring
 - Close to EGJ
 - Inside the staple line - in sleeved stomach
 - Outside staple line - gastric remnant)
 - Difficult to locate/embedded in stomach
- Ulceration
- Distorted stomach shape
- Thickened stomach/hypertrophy



Endoscopic findings



Sutures on GC, away from GEJ

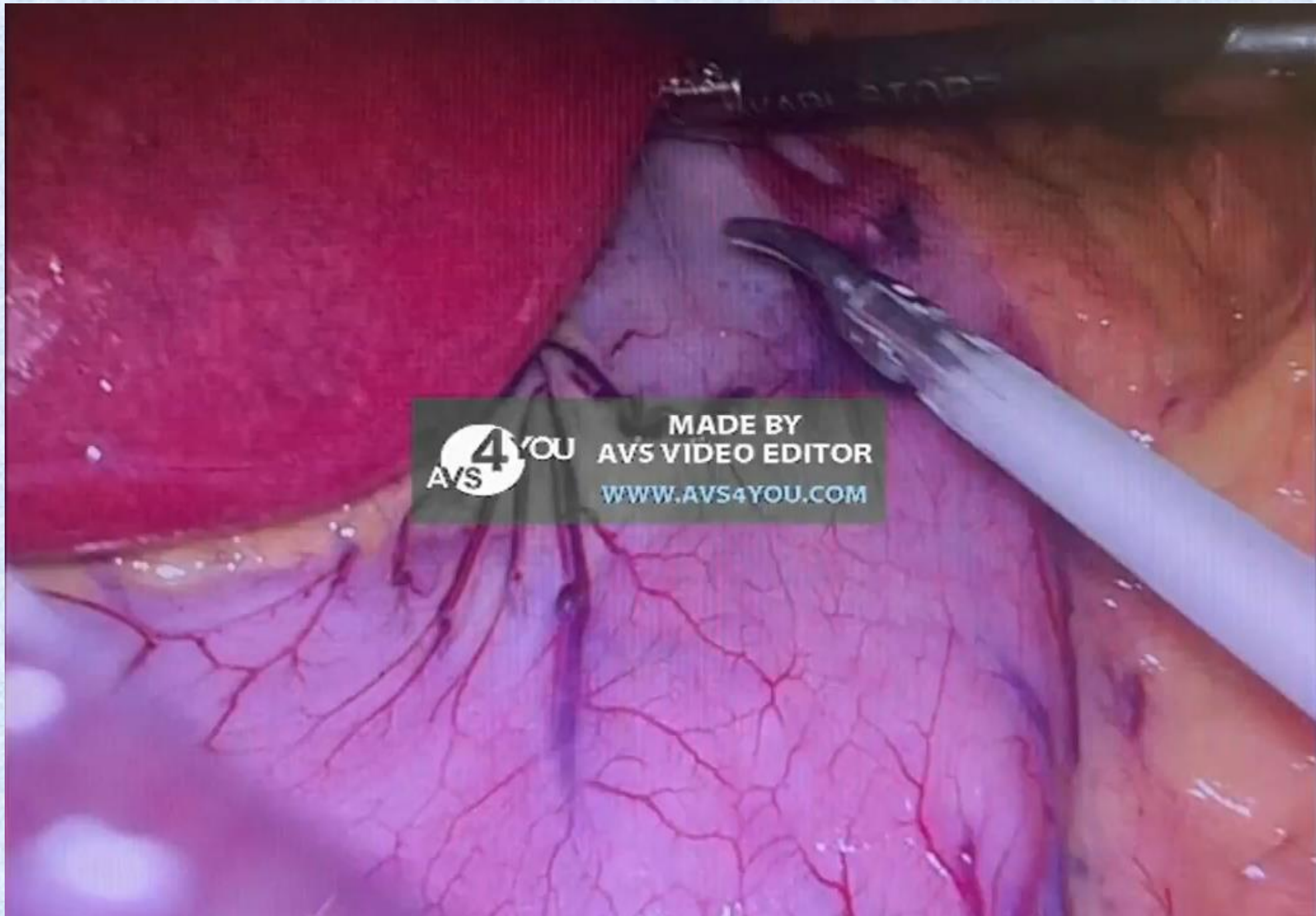
Sutures very close to GEJ



Loose sutures with distortion

Deep ulcers and erosions

Adhesions Distortion



MADE BY
AVS VIDEO EDITOR
WWW.AVS4YOU.COM

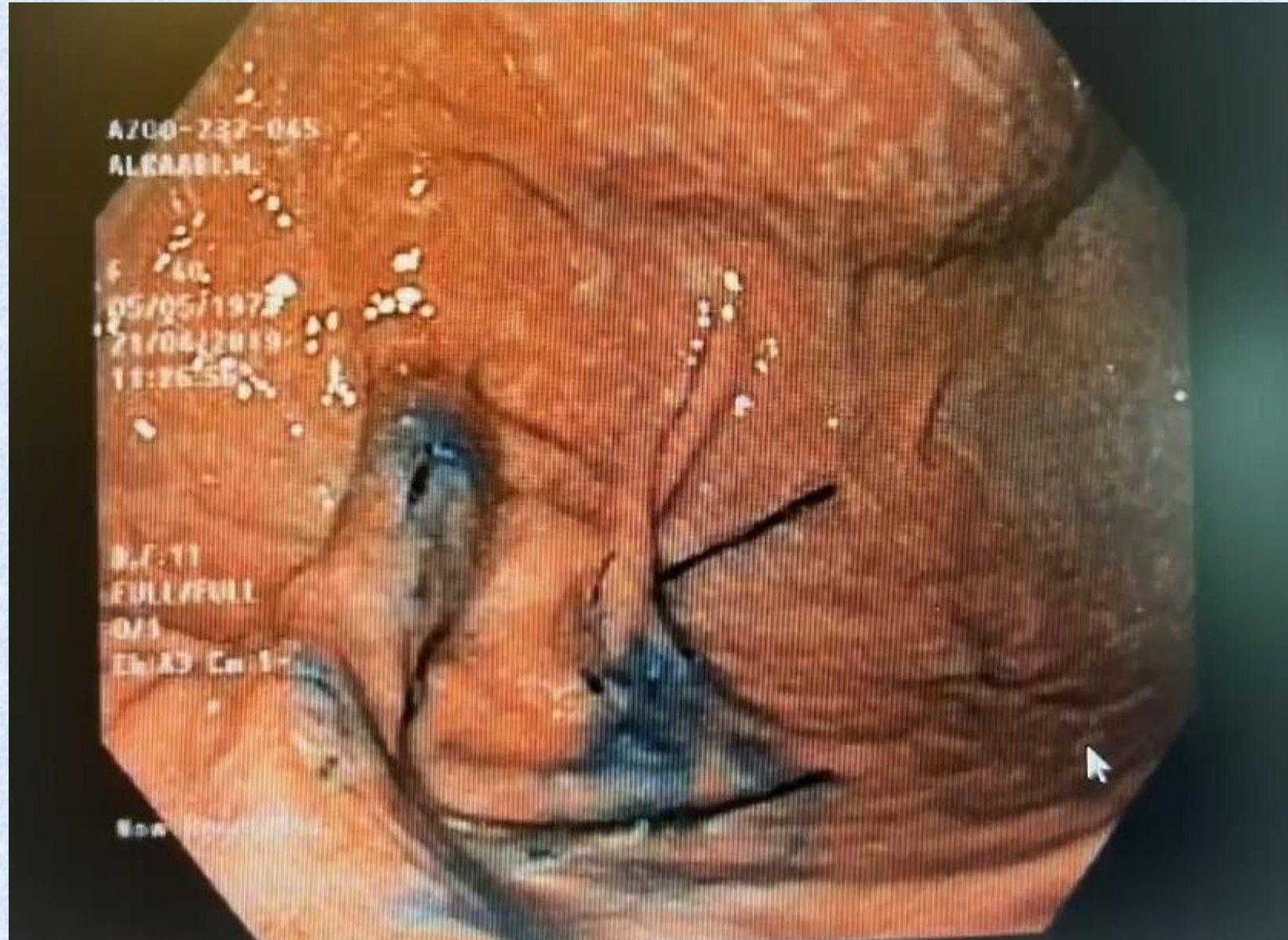
Case 1

- Straightforward
- Easy to identify endoscopically and laparoscopically
- All suture, anchors and cinches are outside staple line



Case 2

- Unsure about position of anchors
- EGD – Suspected areas tattooed
 - To identify areas laparoscopically



Case 3

- Patient did not disclose information about previous ESG
- No UGI symptoms to suggest need for preoperative EGD
- Intraoperative EGD – ESG sutures
- Stomach was not distorted
- Only noticed some thickening
- Appropriate staple height

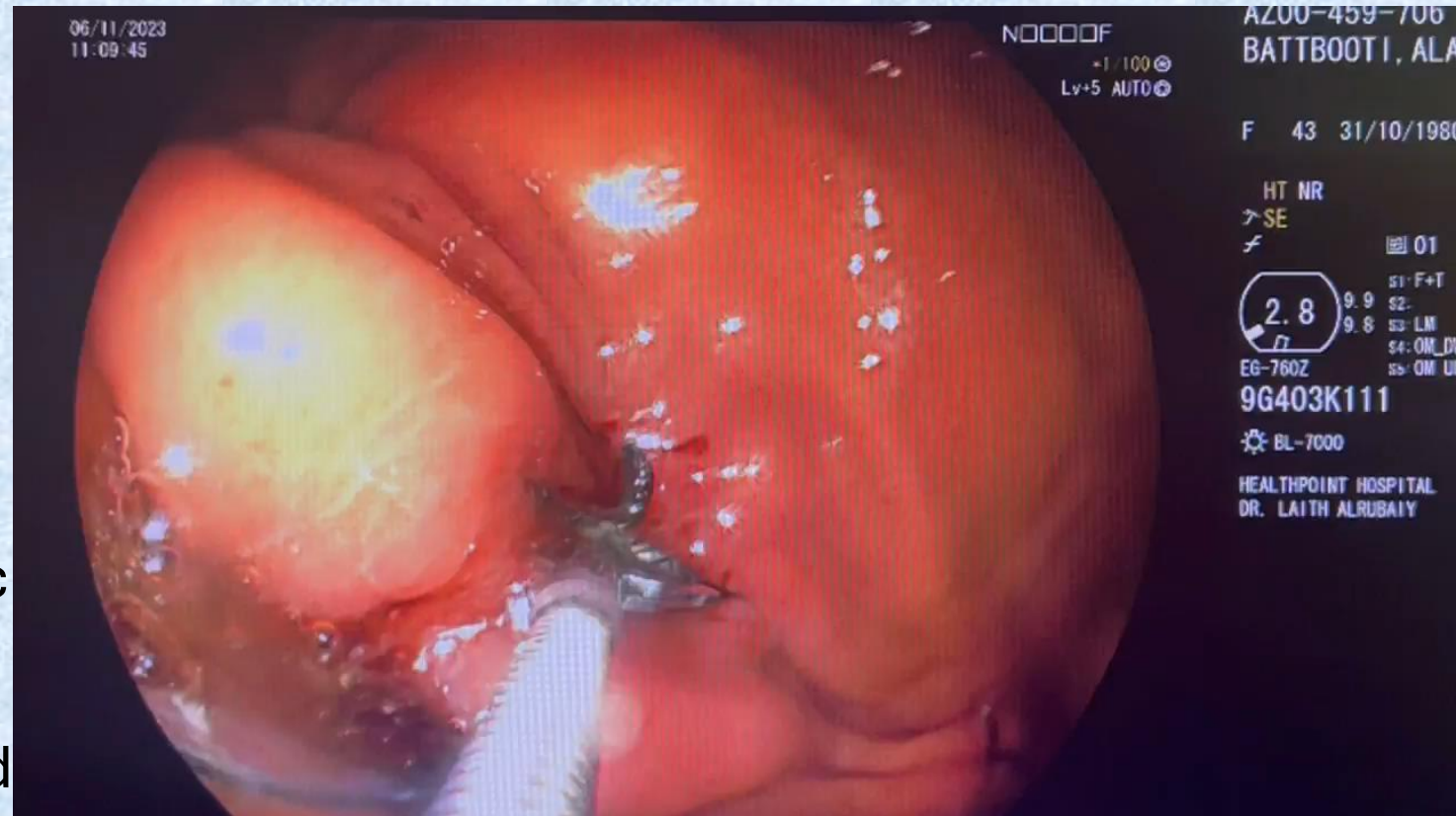
Case 4

- Pre op EGD
 - All sutures outside staple line
 - One close to GEJ
- Attempted endoscopic removal failed
 - Difficult position
- Stomach opened and suture removed laparoscopically
- LSG was done



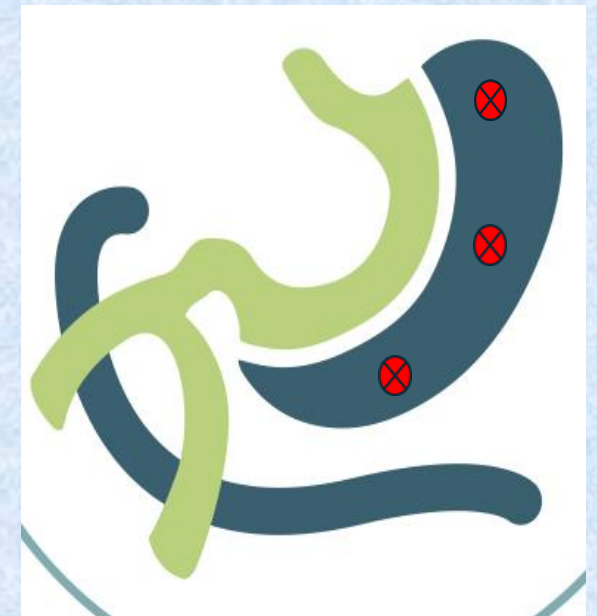
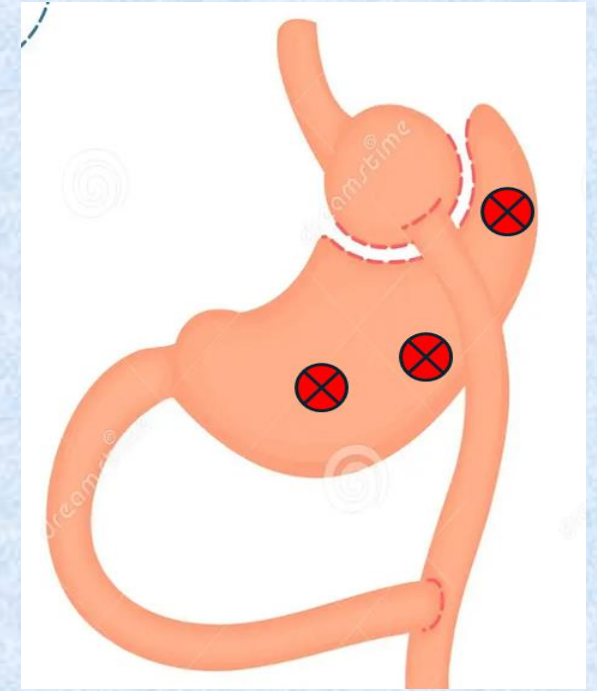
Case 5

- BMI 23 - previous ESG
- Severe pain on eating
- EGD – sutures and anchors
- USS – NAD
- CT – Extensive scarring (granuloma-like lesions)
- Attempted endoscopic removal
 - Only one removed
- Combined Endoscopic/laparoscopic removal
 - 5 excisions
- 6 months later – symptoms improved



Case 6

- BMI 42, Severe reflux and type 2 DM
- EGD – Grade B oesophagitis
- What would you do if sutures cannot be removed endoscopically?
- ? RYGB
 - Leave sutures and anchors in gastric remnant
 - Excision of involved gastric remnant
 - Big chunk of stomach is removed
- ? SADI-S – but patient has reflux
- ? LSG and hope that reflux does not get worse



Conclusion

- Preoperative EGD is important
- Tattooing maybe useful
- Endoscopic removal of malpositioned sutures
- Combined endolaparoscopic removal maybe needed
- Thickened stomach wall
 - May need to adjust staple height
 - Oversewing is advisable
- Intraoperative endoscopy – to check position and guide