2026第一季胃腸肝膽科及胸腔外科聯合討論會

Date: 2026/03/27

Presenter: 張淯荏 醫師

Supervisor: 王彥景 醫師

Patient data

- Name:蔡OO 2727987E
- Age: 61 y/o
- Gender: Male
- Family history: Nil

Medical history

1. Hypertension
2. s/p cholecystectomy
3. Achalasia s/p POEM in A Hospital in 2018

Personal history

- Smoke：unknown
- Alcohol: unknown
- Betel nuts： unknown
- Allergy history： unknown
- Occupation: 工人

Chief complaint

- Post achalasia recurrent dysphagia for two years

Present illness

2025/07

Eckart score 8 (dysphgia & chest pain, BWL 3kg)

2025/08

UGI scope

【Endoscopic findings】
Esophagus: c/w post POEM achalasia, no profound fluid retention but tortured esophagus, relative tense LES by scope evaluation; ECJ r/o post POEM s/p Bx (B)
EC junction: mucosa break < 5 mm
Fundus: no profound fluid retention
Body: normal appearance
Angularis: normal appearance
Antrum: hyperemia, with erosion s/p Bx (A)
Pylorus: normal appearance
Duodenum: normal appearance

【Endoscopic diagnosis/Impression】
1. Reflux esophagitis, LA, Gr A; ECJ r/o post POEM s/p Bx
2. Antral gastritis, with erosion s/p Bx
3. No profound gastroparalysis sign

The Eckardt score for evaluation in achalasia

Score	Weight loss (kg)	Dysphagia	Retrosternal pain	Regurgitation
0	None	None	None	None
1	<5	Occasional	Occasional	Occasional
2	5–10	Daily	Daily	Daily
3	>10	Each meal	Each meal	Each meal

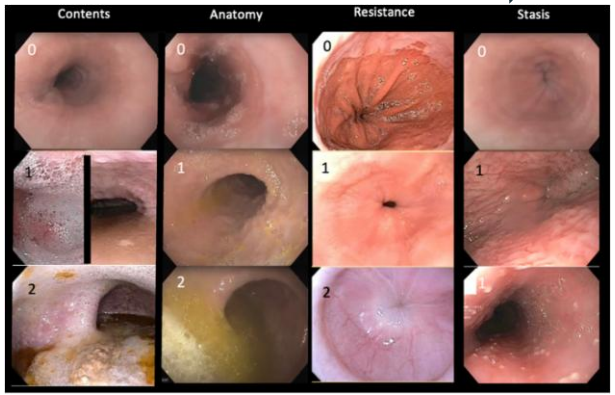
Present illness

2025/07

Eckart score 8
(dysphgia & chest pain, BWL 3kg)

2025/08

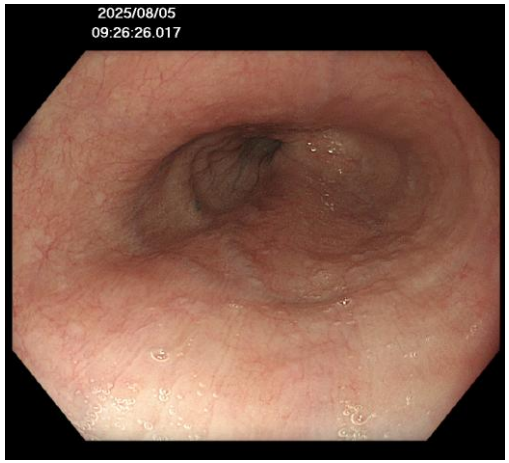
UGI scope
CARS score: 4
(Endoscopic scoring system for achalasia)

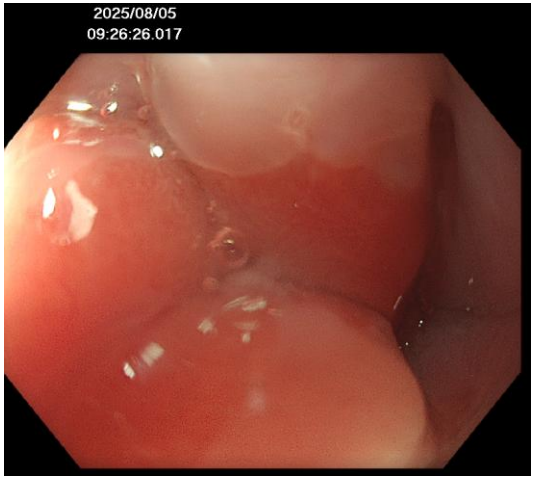


Content: 1

Resistance: 1

Anatomy: 1





Stasis: 1

Present illness

2025/07

Eckart score 8
(dysphgia & chest pain, BWL 3kg

2025/08

UGI scope
CARS score: 4
Time Barium

Timed barium esophagography

The TBE method involves barium ingestion, followed by several sequential radiographs taken at 0, 1, 2, and, 5 minutes in the erect and left posterior oblique positions. Patients were required to withhold from consuming food and fluids the night before the procedure. After ingestion of a fixed volume (150 mL) of a low-density barium sulfate suspension (45% weight by volume; Solotop 140 mg/300 mL) within 15 to 20 seconds, sequential radiographs were captured and used for qualitative and quantitative interpretation.[2,5,16,17] (1) Quality evaluation: In the normal population, the esophagus typically empties the barium suspension within 1 minute for most individuals, and in less than 5 minutes for everyone. Therefore, residual barium in the esophagus beyond 5 minutes was suggestive of achalasia. (2) Quantity evaluation: The height of the barium column was measured at intervals >5 cm at 1 minute and >2 cm at 5 minutes, suggestive of achalasia. Additionally, a reduction of more than 50% in the post-treatment height in the same time interval was defined as successful treatment.

Therefore, residual barium in the esophagus beyond 5 minutes was suggestive of achalasia. (2) Quantity evaluation: The height of the barium column was measured at intervals >5 cm at 1 minute and >2 cm at 5 minutes, suggestive of achalasia. Additionally, a reduction of more than 50% in the post-treatment height in the same time interval was defined as successful treatment.

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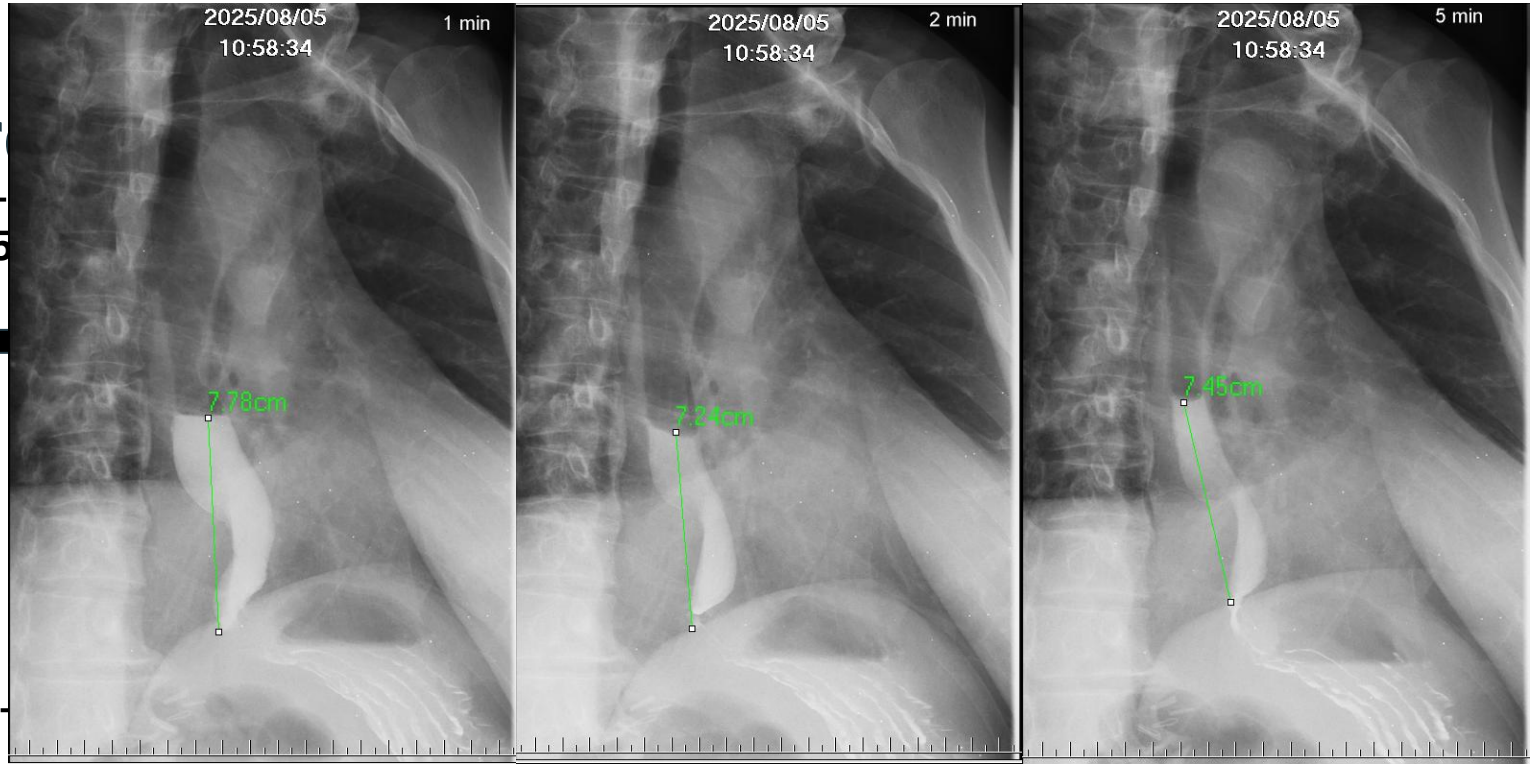
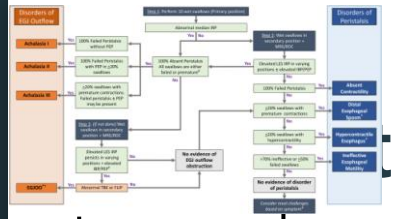


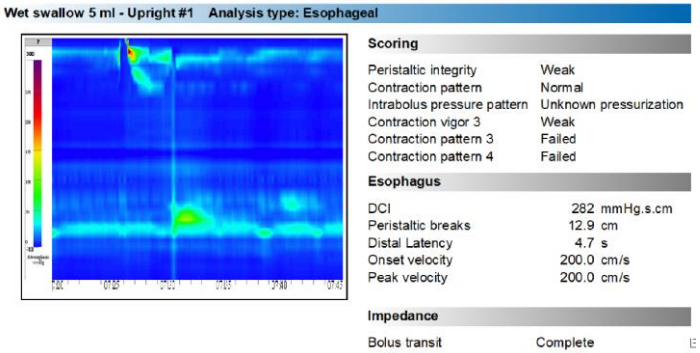
Impression:
1. Achalasia s/p POEM, recurrent achalasia is considered.
2. For other details, please see the above descriptions.



t illness

2025/08

- HRIM: upright type I achalasia relaspsed (supine abscent)



[RESULTS]
1. Resting measurements
- Resting pressure
  - Lower esophageal sphincter: (35) 10-45mmHg
  - Upper esophageal sphincter: (51) 33-180mmHg
- Location of upper margin
  - Lower esophageal sphincter: (44.1)
  - Upper esophageal sphincter: (17.2)
- Length
  - Lower esophageal sphincter: (3.0) 2.4-5.5cm
  - Upper esophageal sphincter: (3.5)

2. Esophagogastric junction (EGJ) outflow & peristalsis during wet swallows
- Integrated relaxation pressure (IRP) (median)
  - Supine: (20.92) <21mmHg (by MMS HRIM)
  - Upright: (33.64) <15mmHg (by MMS HRIM)
- Distal contractile integral (DCI) (mean)
  - Supine: (141) 450-8000mmHg.s.cm
  - Upright: (194) 450-8000mmHg.s.cm
- Distal latency (mean)
  - Supine: (4.4) >4.5s
  - Upright: (5.1) >4.5s
- Multiple rapid swallows (MRS) (DCI ratio)
  - Supine: (98) MRS DCI/(141) Baseline DCI=(0.69)(Normal>1)
- Rapid drink challenge (RDC) (IRP ratio)
  - Upright: (32) RDC IRP/(33.64) Baseline IRP=(0.95)(Normal <1)

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2025/08

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3. Esophagogastric junction (EGJ) competence
■ EGJ morphology (supine)
■Type I (superimposed of LES and crural diaphragm)
■ EGJ contractile integral
(47) mm Hg·cm (supine) Normal range: 65 (47-95, 127) (median (IQR, 95%))
(72) mm Hg·cm (upright)

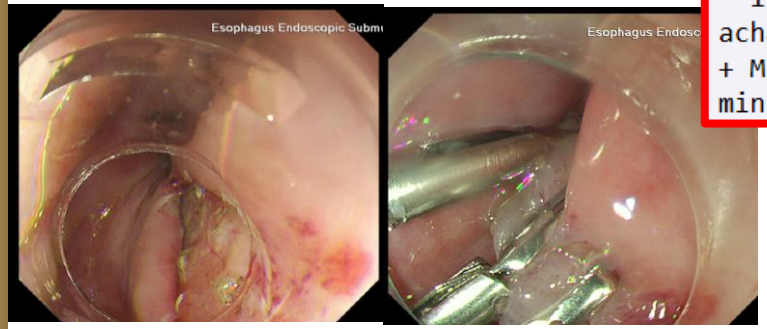
[CONCLUSIONS]
■Achalasia, Type I

Note:
. Supine IRP no profound elevated (post POEM) but impaired MRS, with 100% fail peristasis
. Upright IRP severely elevated, borderline normal RDC but 100% fail peristasis
- c/w post POEM Type I Achalasia
. TBE (2025/8/5) showed 7.69cm (1min), 7.55cm (5min)
- c/w Achalasia with obstruction

Present illness

2025/08

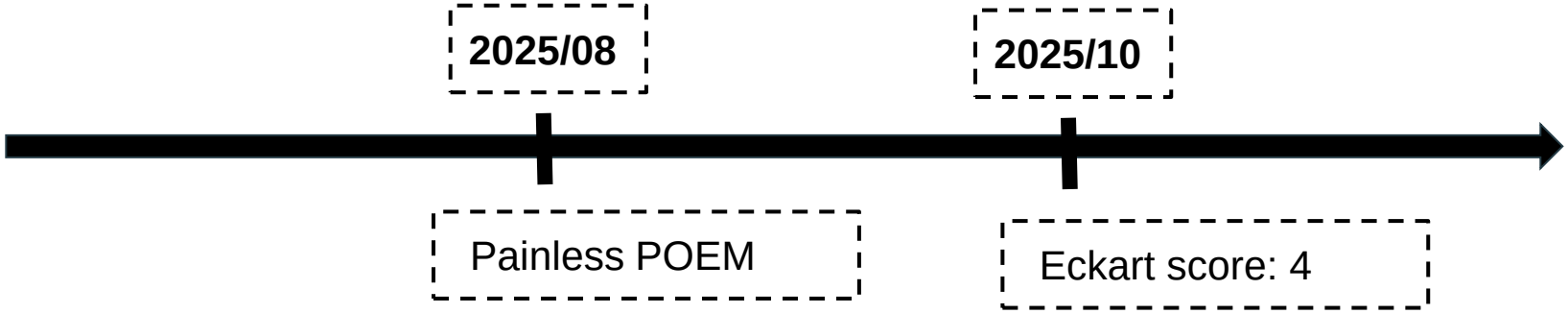
Painless POEM



【Endoscopic findings】
[EGD]
Esophagus: normal appearance
E-C junction: mucosal break > 5mm with mild resistance and esophageal dilatation, compatible with achalasia, type I, post-POEM at anterior wall, s/p Posterior wall POEM + MICRO-TECH clips x 4 for wound closure (procedure time = 1 hr 11 mins).
Fundus: normal appearance
Body: normal appearance
Angularis: normal appearance
Antrum: normal appearance
Pylorus: normal appearance
Duodenum: normal appearance
Ampulla of Vater: normal appearance

【Endoscopic diagnosis】
1. Mild resistance and esophageal dilatation, compatible with achalasia, type I, post-POEM at anterior wall, s/p Posterior wall POEM + MICRO-TECH clips x 4 for wound closure (procedure time = 1 hr 11 mins).

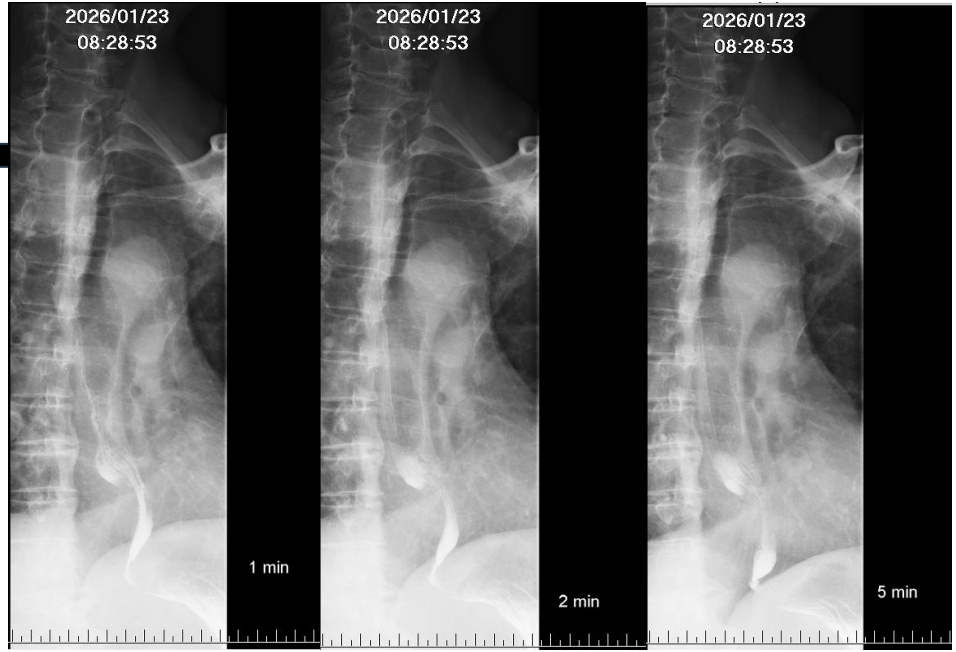
Present illness



Present illness

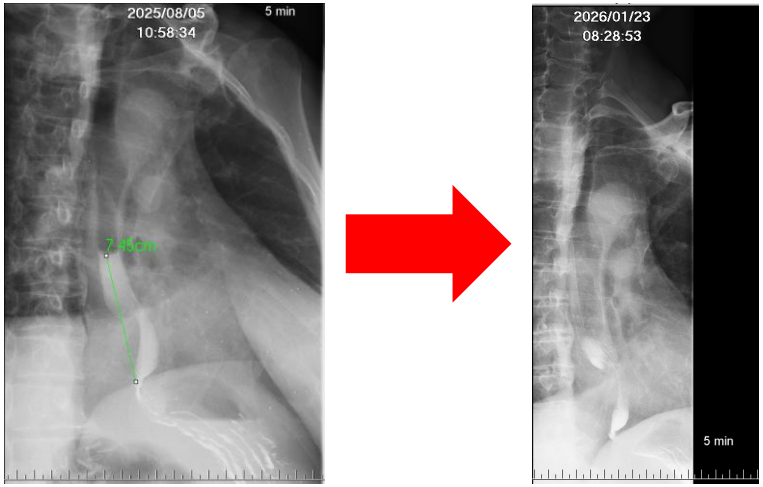
2026/01

- Reflux and epigastric pain still (improve after intake ?)
- Timed barium again



Comparison

1. Eckart score 8 -> 4
2. Timed barium



Final diagnosis

- Type I achalasia
- s/p POEM 2018 at A Hospital
- recurrent type I achalasia s/p POEM at TCVGH 2025/08

Discussion

Post POEM complication symptom, evaluation

Gastroenterology 2024;167:1483–1490

CLINICAL PRACTICE UPDATES

AGA Clinical Practice Update on Advances in Per-Oral Endoscopic Myotomy (POEM) and Remaining Questions—What We Have Learned in the Past Decade: Expert Review

Dennis Yang,[1] Robert Bechara,[2] Christy M. Dunst,[3] and Vani J. A. Konda[4]

Symptom

Acute Post-POEM Symptoms (Days 1–7):

- **Chest Pain: The most common issue (67% of patients), generally managed with medication.**
- **Subcutaneous/Mediastinal Emphysema: Gas leakage leading to air trapped under the skin, usually resolving without intervention.**
- **Fever/Abdominal Distension: often responding to conservative treatment.**
- **Bleeding or Infection: Rare but serious potential acute complications.**

Chronic/Long-Term Post-POEM Symptoms (Weeks to Years):

- **GERD (Reflux): Highly common, 9%–43% of patients as symptomatic GERD. Increased risk with full-thickness myotomy.**
- **Recurrent/Persistent Dysphagia: Occurs in approximately 9.8% of patients, sometimes necessitating retreatment, such as balloon dilation or repeat POEM.**
- **Esophagitis: Erosive esophagitis is common, with 13%–68% reported**
- **Weight Loss/Persistent Bloating**

Post-Procedure Reflux Management (GERD)

- **Empiric Acid Suppression:** Pharmacologic acid suppression (e.g., PPIs and P-CABs) is strongly recommended immediately after POEM due to high rates of post-procedure reflux (41%–56%) and esophagitis (41%–65%).
- **Treatment Duration:** Continue acid suppression for at least **3–6 months** until further re-evaluation.
- **Optimizing Therapy:** Ensure PPIs are taken **30–60 minutes before meal.**

Long-Term Monitoring

- **Routine Monitoring:** All patients should undergo objective monitoring for GERD. Testing (**pH monitoring** or **endoscopy**) is generally performed **6–12 months post-procedure**.
- **Cancer Risk:** Patients with achalasia have a **5-fold higher risk** of esophageal cancer.
- **Diagnostic Tools:**
  - **Endoscopy:**
  - **pH Monitoring:**
  - **FLIP & Esophagram**

Risk factor for POEM failure

- **Previous Treatments**: Prior interventions such as pneumatic dilation or Heller's myotomy
- **Anatomical/Disease Severity**: Sigmoid-type esophagus (highly tortuous/dilated) and significant esophageal dilatation (diameter>3.5 cm) indicate advanced disease
- Patient Characteristics: **Younger age (<45 years)** and **long disease duration (>10years)**
- Clinical Indicators: **high pre-treatment Eckardt score (>9)**
- Intra-procedural Factors: **Submucosal fibrosis**, which complicates the endoscopic tunnel creation, and mucosal injury are significant factors for technical failure.
- Post-procedural Factors: **the development of severe GERD**

Management of Failed Initial Myotomy

- **Failure Rate:** Approximately **10%–15%**
- **POEM vs. PD:** For patients who failed a previous myotomy (LHM or POEM), **POEM is generally superior** to Pneumatic Dilation (PD), showing a significantly higher success rate (62% vs. 27%).
- **Personalized Approach:** The choice of salvage therapy should be based on shared decision-making, local expertise, and the specific cause of the initial failure.

討論

- **院內醫材限制與氣球擴張術的困境**：復發個案再次手術的纖維化風險很高。若要採用氣球擴張術做救援治療，必須使用專用的「大號氣球」（與一般食道擴張不同），但目前院內耗材受限，未來若有需求，可能必須想辦法從美國以專案形式進口。
- **林志鴻主任提問「何時會自己做 POEM，何時轉給外科做傳統手術」**，醫師表示主要仰賴醫病共享決策（SDM）。針對年輕或診斷明確的患者，會同時提供內視鏡（POEM）與外科手術的選項讓病人選擇。
- **特殊個案處置**：如果是麻醉風險極高（如心臟功能極差）的年老患者，團隊會考慮採用局部施打肉毒桿菌（Botox）的替代方案，但此項目與 ESD 價位相似，需要自費數萬元。
- **健保考量**：若患者強烈希望能使用全健保給付的治療，則會傾向將病患轉診給外科進行評估。

Thank you for your attention