

PillCam ESO Capsule: An Alternative Diagnostic Tool During the Covid-19 Pandemic. First Irish Experience.

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Pillcam Eso.
Take 2,600 images in 20 min i.e., 14 images/sec

Background:

- The Covid-19 pandemic has led to unprecedented change to endoscopy practice. At the peak of the pandemic in Ireland, many routine and surveillance endoscopies were deferred, with only urgent procedures prioritised. To allow safe and effective upper gastrointestinal investigations continue, alternative modalities require evaluation.
- HSE guidance document for safe endoscopy in pandemic conditions recommends that alternative non-invasive investigation be considered for all non-urgent referrals for endoscopy.
- The PillCam ESO® (Given Imaging Ltd., Yoqneam, Israel) offers such an alternative for evaluation of the UGI tract.
- We conducted a prospective analysis of PillCam ESO® as an alternative diagnostic tool during the Covid-19 pandemic to help tackle the increasing waiting list for gastroscopy at our unit.

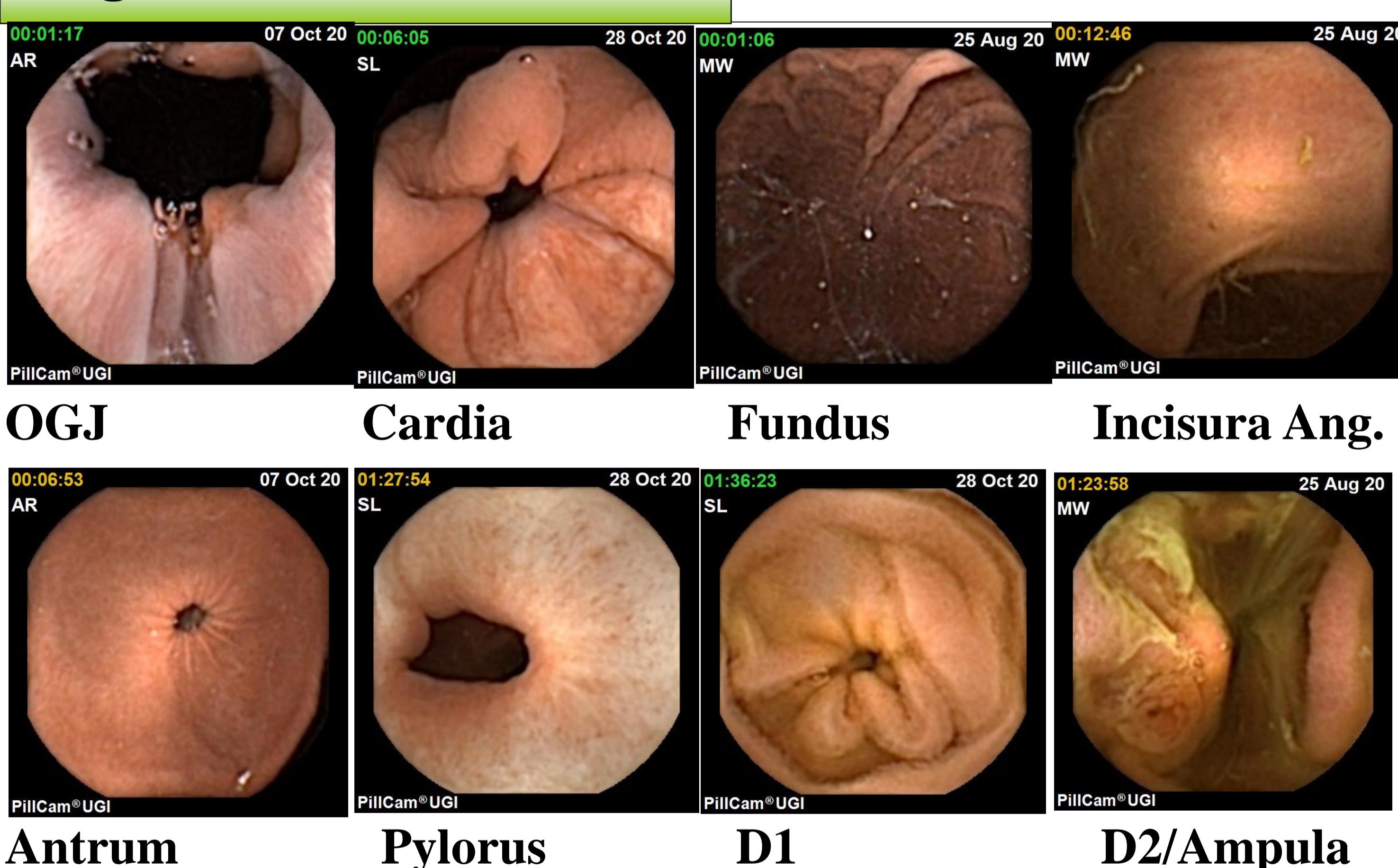
Methods:

- Aim:** To assess if the PillCam ESO can identify important anatomical landmarks as stated in the British Society of Gastroenterology quality standards for upper gastrointestinal endoscopy and if it can effectively identify pathology in the Upper GI Tract.
- Patients who fitted our inclusion criteria were prospectively invited into our trial. The three main indications were:
 - ✓ 1; patients with dyspepsia less than 40 years of age with no red flag symptoms,
 - 2; known cirrhosis to screen for varices,
 - 3; UGI bleeds with a low Blatchford score (≤ 2).
- A local protocol for ingestion and series of positional guidelines was developed for the procedure. Ethical approval was granted for this study.
- Capsule transit time, endoscopic landmarks, and pathology detection were evaluated by two independent endoscopists.

Results:

- 23 exams have been successfully performed in the GI Lab from June 2020 to date without complications.
- The most frequent indications were dyspepsia (61%) and abdominal pain (22%).
- IM Metoclopramide was administered in 65% of cases.
- 30% of procedures were normal.
- Complete visualisation of the following major anatomical landmarks was achieved in 100% of cases: Oesophagus, Oesophageal-Gastro junction, Greater Curve, Antrum, Pylorus, First and Second part of Duodenum.
- A full view of the Cardia, Fundus, Lesser Curve, and Incisura Angularis was obtained in 96%, 87%, 91%, and 96% of cases, respectively.
- The mean capsule gastric transit times was 54 mins SD (31.8).
- Reflux oesophagitis and gastritis were the most common pathologies detected. Adenocarcinoma of the OG junction was detected in 1 case.

Figure 1: PillCam Eso



Conclusion:

- The PillCam ESO achieves excellent views of the upper GI tract.
- In selective cases, it is a safe alternative to gastroscopy which may help reduce gastroscopy waiting times.

References: