



# HILZO ATM Oesophageal Stent – A Single Operator Experience

Dr Matthew Muller

Dr Ajay Mistry

Dr Robert Stockwell

Lancashire Teaching Hospitals NHS Foundation Trust

# Introduction

- In 2004 the British Society of Interventional Radiology (BSIR) published the Registry of Oesophageal Stenting (ROST) which included 11 stent models [1].
- Products currently on the market feature innovations in design and construction intended to reduce complications such as tumour in-growth and stent migration [2].
- Radiologically inserted HILZO ATM stent (Macromed UK) have been used to treat malignant oesophageal stricture within Lancashire Teaching Hospitals NHS Foundation Trust since 2018.

# HILZO ATM



- Anti-migration heads.
- Inner and outer layer of PTFE to reduce tumour ingrowth and food impaction.
- Small profile delivery system.
- Up to 15cm lengths.

<https://www.macromed.co.uk/products/hilzo-atm-oesophageal-stent/>



# Objective

- The primary objective of this study was to determine the observed incidence of stent migration within our cohort.

# Methodology

- Retrospective Observational Study.
- Structure and data parameters closely modelled on the BSIR ROST.
- HILZO ATM stents inserted by a single Consultant Radiologist operator between November 2018 and October 2021.
- Demographic and clinical data retrieved from the Patient Archiving and Communication System (PACS) and Electronic Medical Record (EMR) entered into a Microsoft Excel spreadsheet and interrogated.

# Results

- 33 patients were identified: 25 (76%) were Male, 23 (70%) were >70 years of age and 25 (76%) had malignant adenocarcinoma at the lower third of the oesophagus.
- Post-stent survival range was 19-1221 days with a 50% mortality within 147 days.
- Incidence of stent migration was N=1 (3%) and misplacement at the time of deployment N=2 (6%).
- N=5 (15%) underwent re-stenting at 11-943 days post primary stenting.

# Case Study: stent migration N=1

- 73-year-old Female with Squamous Cell Carcinoma at the lower oesophagus.
- Received post-stent Radiotherapy.
- Barium swallow performed at 64 days post-stent insertion demonstrated the stent within stomach.
- There was free flow of barium through the distal oesophagus and gastro-oesophageal junction representing Radiotherapy response.

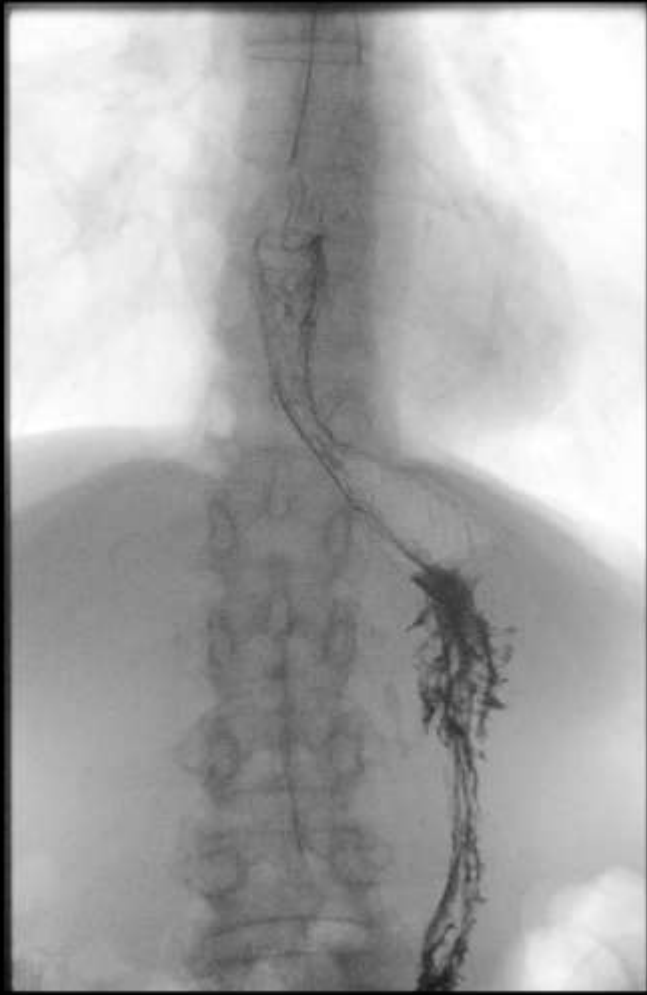


Figure 1: post-stent  
Fluoroscopy showing stent  
above the GOJ.



Figure 2: Post-Radiotherapy  
Fluoroscopy showing migration  
of stent to stomach.



Figure 3: Barium swallow  
showing free-flow of Barium  
through oesophagus and GOJ.



# Conclusion

- Patient cohort comparable with published national data.
- Post-stent survival appears longer than in 2004 when the ROST was first published.
- Single case of stent migration is presumed to be related to post-stent Radiotherapy treatment response.

Conflict of Interest: none to declare.

References:

- 1) Registry of Oesophageal Stenting (ROST) First Report 2004, Denrite Clinical Systems LTD, 2004
- 2) <http://www.macromed.co.uk/wp-content/uploads/2021/02/HILZO-esophageal-ATM-stent-brochure.pdf>