

DISPLACEMENT OF THE LINX DEVICE INTO THE THORACIC CAVITY AFTER TRAUMA: A CASE REPORT IN THE ACTIVE DUTY POPULATION

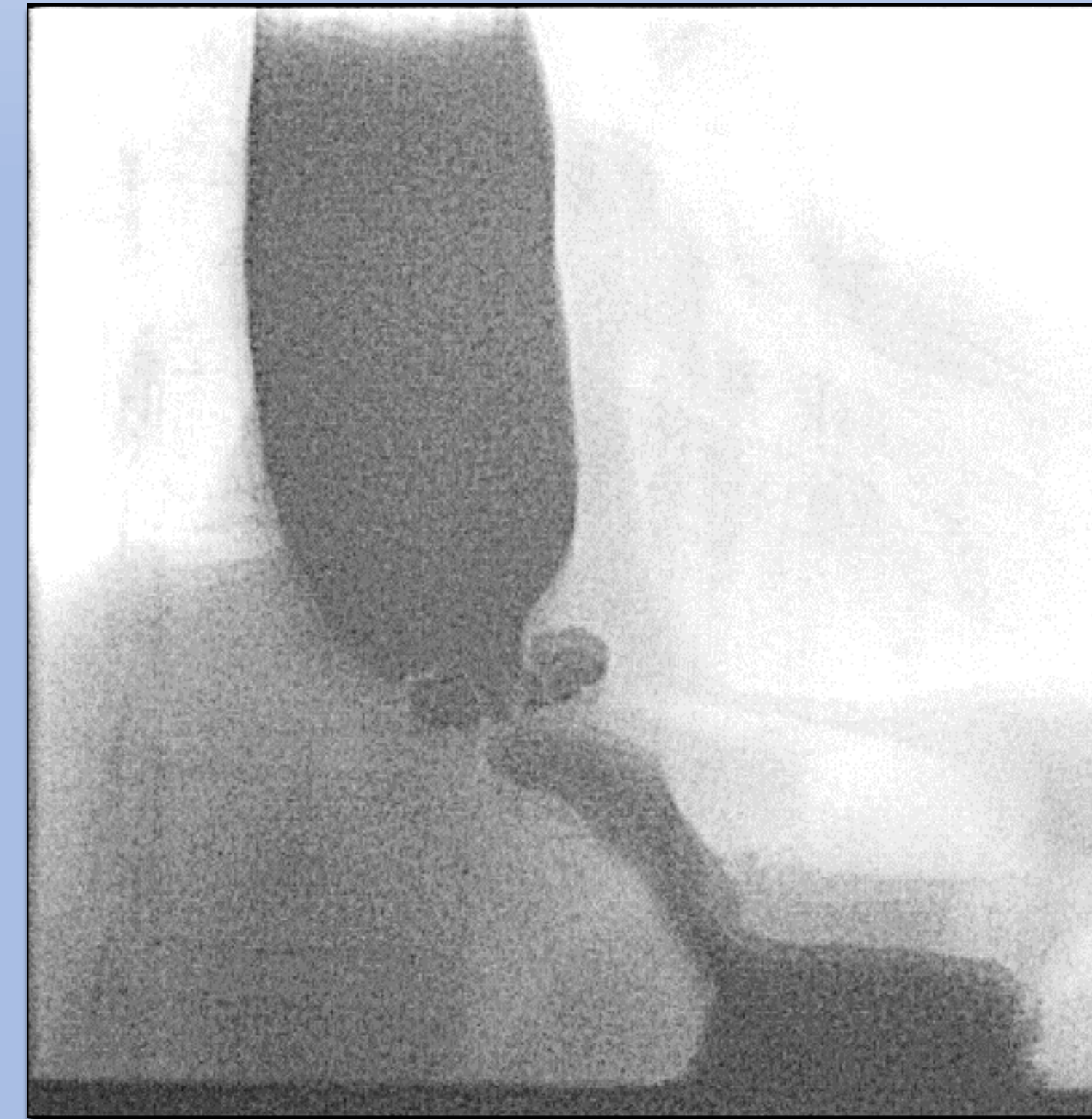
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Introduction

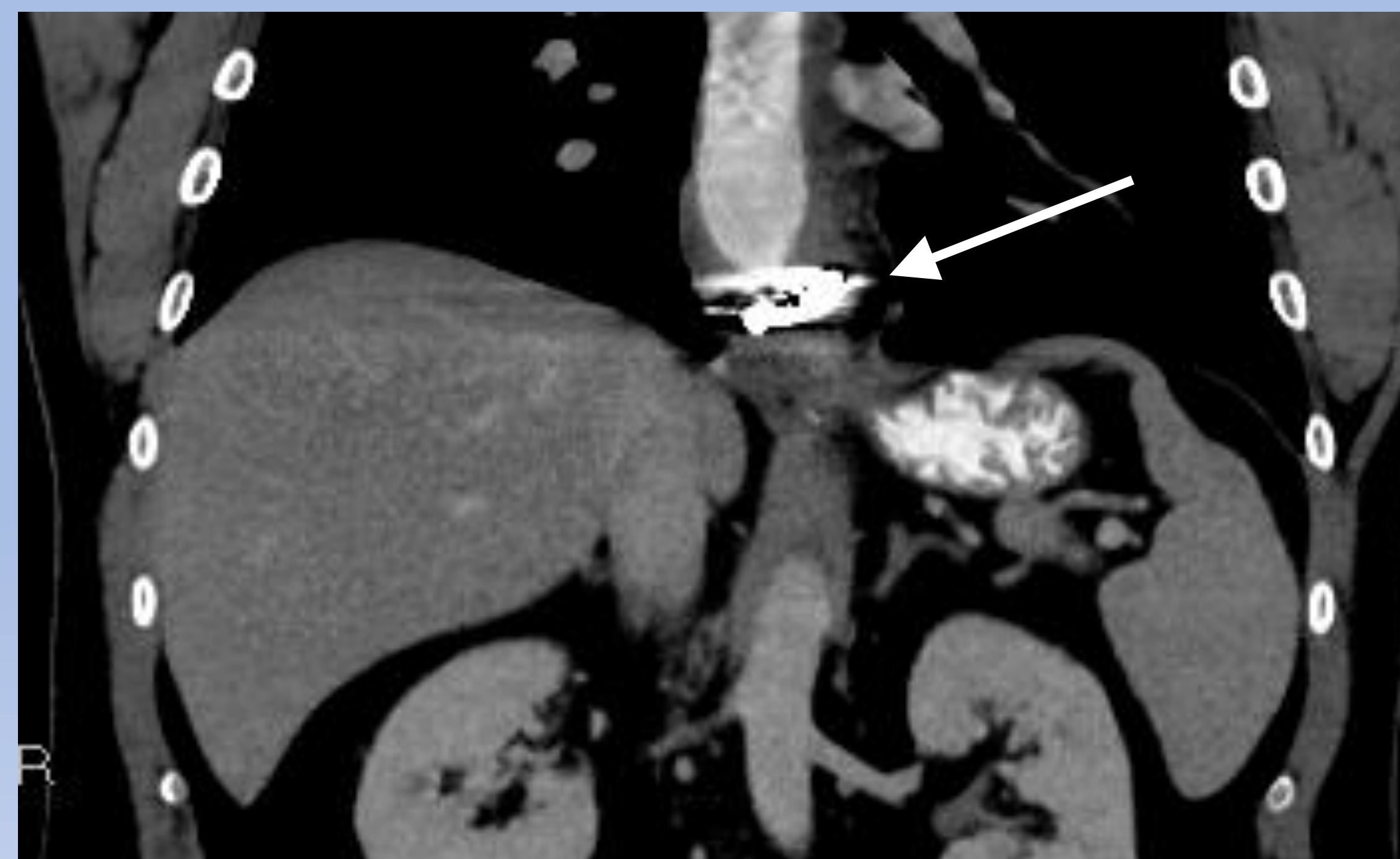
- LINX Reflux Management System used for refractory gastroesophageal reflux (GERD)
- A ring made up of magnetically connected beads arranged in a concentric orientation
- Deemed a safe and effective alternative to Nissen fundoplication, very few complications reported to date

Case Description

- 41 yo active duty male with medically refractory GERD, otherwise healthy
- Initial workup significant for:
 - GERD, Barrett's (w/o dysplasia), Normal gastric emptying, DeMeester score 43.7, Symptom associated probability of 98% on PPI, Normal Manometry
- Underwent laparoscopic LINX placement with crural repair (2.8 cm hiatal hernia)
- 13 months post op pt fell from five feet, landing on coccyx, with immediate return of dysphagia
 - Immediate workup showed cranial displacement of the LINX into the thorax and recurrence of the hiatal hernia, no other significant injuries or erosion
- Trial of medical management (PPI / lifestyle mod), without adequate resolution of symptoms – GERD and dysphagia



Ten months post traumatic fall, showing the LINX device within the thorax, and expansion of the magnetic beads, with passage of the contrast into the stomach.



Immediate post impact coronal view of a contrast study, showing the LINX device within the thorax, and inflammation at the crura.

Case Description (Cont.)

- 3 x attempts of dilation, with interval improvement, but short term return of symptoms
- Underwent uncomplicated laparoscopic recurrent hiatal hernia repair with LINX explantation and Nissen Fundoplication 27 months post injury
- Has since resumed normal a diet and remains completely asymptomatic without PPI use

Discussion

- Pain and dysphagia are most common complications
- Erosions is the most serious complication reported, although rare
- Overall, requirement for device removal is uncommon (~ 3.5%)
- This is the first description of either traumatic intrathoracic displacement, or traumatic recurrent hital hernia in a LINX patient
- First case description of either intrathoracic displacement, or recurrent hiatal hernia
 - LINX thought to be protective against hiatal recurrence (due to increased scarring)
- Although increased inflammation and scarring around the crura appreciated intraoperatively, explantation and repair of the recurrent hiatal hernia is a safe and effective option in refractory cases