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Audit regarding CT reporting of large complex abdominal wall hernias.

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Aim:

To evaluate the quality of CT reporting for large abdominal hernias at a District General Hospital and to develop a standardized reporting framework. The goal is to improve the clarity and consistency of radiological assessments, thereby enhancing preoperative planning and supporting informed surgical decision-making.

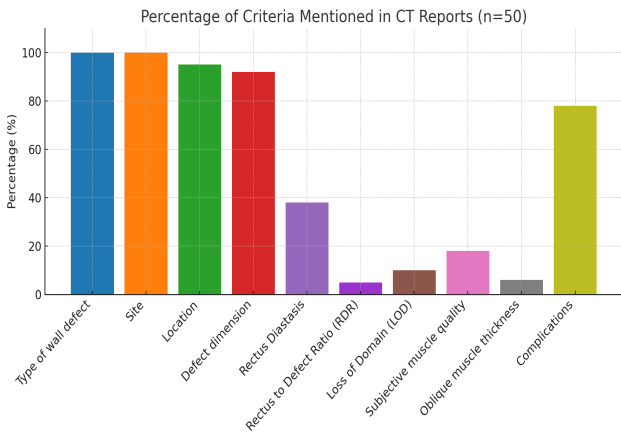
Methodology:

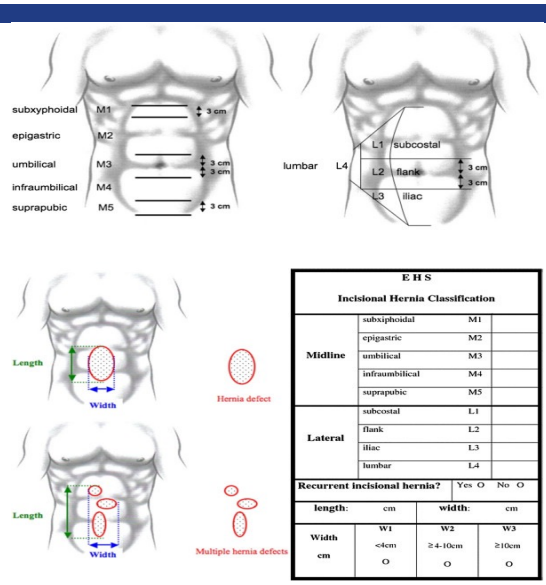
A retrospective audit of 50 patients with large abdominal hernias with preoperative CT scans assessed key features including hernia location, size, sac contents, rectus diastasis, domain loss, and complications such as obstruction or ischemia. Muscle condition and anatomical factors impacting surgical planning were also evaluated.

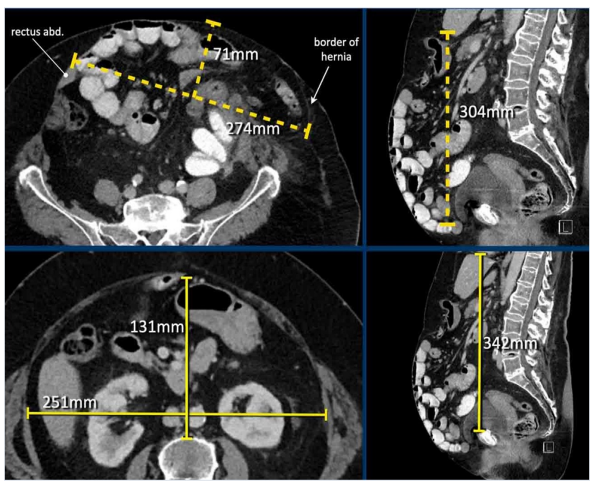
Results:

The analysis revealed variability in the documentation of critical diagnostic features:

- **Hernia site** documented in **100%**, **location** in **95.2%**
- **Defect dimensions** reported in **92%** of cases
- **Rectus diastasis** (38%) and **muscle quality** (18%) were infrequently mentioned
- **Loss of domain** and **oblique muscle thickness** were documented in only **10%** and **6%**, respectively
- **Complicating factors** (e.g. stoma, mesh, incarceration) included in **78%** of reports







Structured Report

Number of defects	[ ]
Defect 1	[primary / incisional]
Site	[medial / lateral]
Location	[from xiphoid, symphysis, 12 th rib, iliac crest]
Defect dimension	Length: [ ] cm Width: [ ] cm
Defect 2	[same as above]
Rectus Diastasis	[present| absent]. Length: [ ] cm Width: [ ] cm.
Rectus to defect Ratio	[right rectus] cm + [left rectus] cm / [width of defect] cm
Loss of Domain	[HSV / TPV] x 100% (HSV = hernia sac volume) (TPV = total peritoneal volume = Hernia sac volume + abdominal cavity volume)
Subjective impression of muscle and quality	[ ]
Thickness oblique abdominal muscle	[ ]
Presence of	[Stoma | Fistula | Mesh | Collection | Previous surgery | Adhesions | Incarceration]

Conclusion:

The findings underscore inconsistencies in CT reporting for large complex abdominal hernias, particularly in documenting crucial aspects like muscle quality and domain loss. These gaps in reporting can impact surgical planning and outcomes. The audit advocates for the development of standardized CT reporting guidelines to ensure comprehensive and consistent evaluations, ultimately aiding surgeons in making informed decisions for hernia repair.

Reference: www.radiologyassistant.nl/abdominal wall hernias, www.pubmed.com