THE ROLE OF ROUTINE ULTRASOUND SCAN IN UMBILICAL HERNIA MANAGEMENT

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INTRODUCTION

Umbilical ultrasound scans (US) have been described as a useful tool and an adjunct for abdominal wall hernia diagnoses. These US could be being performed without proper indication as there is limited evidence as to whether routine umbilical US aid in surgical decision-making.

OBJECTIVE

Examining whether umbilical US and/or clinical exam affected surgical management and to report the frequency of pre-consultation umbilical US ordered.

METHODS

Retrospective chart review

2017-2018

Inclusion criteria

- Age over 18 years old
- Referral for umbilical hernia management
- 2 General surgeons

Database

- *Rate of pre consultation US*
- *Palpable hernia*
- *US positive for hernia*
- *Surgical decision making*

RESULTS

Patients' characteristics



- 136 Patients
- Mean age 48.28 years
- Mean BMI 33.22 kg/m2
- Male sex 66.18%

Pre consultation Ultrasound findings

- 90/136 (66.2%) patients had an umbilical US.
- An umbilical hernia was detected in 88/90 (97.8%) of US scans (US+)
- The average fascial defect diameter detected on US was 1.54 ± 0.82cm

Comparing Clinical Examination Findings and umbilical Ultrasound Results on Surgical Decision Making

	Result
Total number of umbilical hernia repairs (S+)	91/136 (66.9%)
Clinically detectable hernia leading to surgery (CE+ S+)	89/130 (68.5%)
Hernia detected by routine US leading to surgery (independent of clinical exam findings) (CE +/-, US+, S+)	58/88 (65.9%)
Clinical examination significantly affecting surgical decision making (CE +/-, S+/-)	93/136 (68.4%)
Positive ultrasound finding leading to surgery in the absence of positive clinical examination (CE-, US+, S+)	1/136 (0.74%)

* *CE = Clinical Examination, US= Umbilical Ultrasound, S= Surgery*

RESULTS CONTINUED

- Routinely ordered umbilical US will affect surgical decision making <1% of the time
- Clinical examination will affect surgical decision making in >99% of the time

CONCLUSION

- **Umbilical US prior to general surgery consultation are frequently being performed.**
- **The majority of patients referred had a palpable hernia.**
- **Pre-consultation US scans infrequently affect surgical decision-making compared to clinical exam.**
- **Umbilical US should not be ordered routinely prior to general surgery consultation.**