The Protracted Preoperative Clinical Paradigm in Women with Groin Hernias – Is it Reducible?

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Background

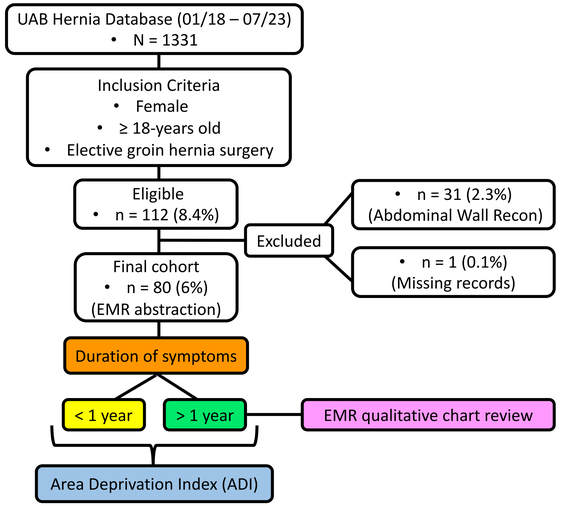
- **Groin hernias** are a common surgical problem; however, it is relatively **uncommon in females.**
- Many women report **vague symptoms** and consult multiple **non-surgical providers** prior to surgical evaluation.
- A knowledge gap exists regarding other contributory factors that may portend a **protracted preoperative clinical course.**

Objective

- **Primary:** to describe our experience of the natural history of groin hernias in women at a high-volume tertiary medical center.
- **Secondary:** Elucidate possible reasons for protracted preoperative clinical course.

Methods

- Retrospective cohort analysis.
- We abstracted duration of **symptoms** prior to diagnosis, **image modality** used, and **operative findings** at elective surgical repair.
- Univariate and bivariate analyses of outcomes (p<0.05 significance level).
- Protocol approved by UAB Institutional Review Board (IRB-300003313).



Results

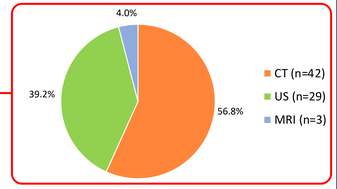
Demographics

Variable	n (%)
Age (years)	
Mean ± SD	61 ± 15
Race	
White	55 (68.8)
Black	20 (25.0)
Other (Asian/ Latino)	5 (6.2)
Employment Status	
Retired	32 (40.0)
Employed	28 (35.0)
Unemployed	10 (12.5)
Unknown	6 (7.5)
Social Grant	4 (5.0)

Variable	n (%)
Smoker	
No	74 (92.5)
Yes	6 (7.5)
BMI	
Mean ± SD	27.3 ± 5.8
ASA	
I	4 (5.0)
II	22 (27.5)
III	54 (67.5)

Image Modality

Pre-operative imaging	n (%)
Yes	63 (78.8)
No	17 (21.2)



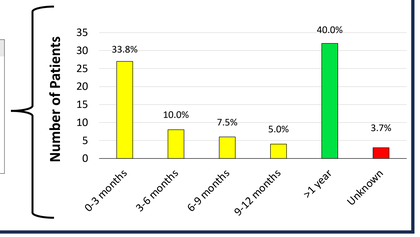
Factors Influencing Protracted Preoperative Clinical Course

Variable	n (%)
Patient factors - declining surgery	**5 (15.6)**
Multiple life stressors (husband with terminal illness)	1 (3.1)
Symptoms not interfering with ADLs	3 (9.4)
Fear of mesh complications	1 (3.1)
Provider - advised against surgery	**7 (21.9)**
High risk due to low BMI (14.76)	1 (3.1)
Multiple previous repairs - unlikely to relieve symptoms	3 (9.4)
Concomitant infection (UTI)	1 (3.1)
Severe ascites	2 (6.3)
No exact reason noted	**20 (62.5)**

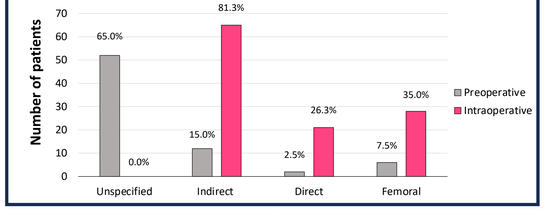
ADLs - activities of daily living, BMI - body mass index, UTI - urinary tract infection

Duration of Symptoms

Symptoms	n (%)
Non-specific groin pain	59 (73.8)
Bulge in groin - intermittent	39 (48.8)
Bulge in groin - constant	20 (25.0)
Pain in IIN distribution	4 (5.0)
Pain in GFN distribution	2 (2.5)
Asymptomatic	2 (2.5)
Pain in IHN distribution	1 (1.3)



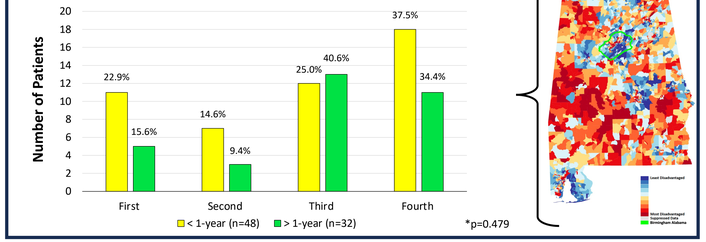
Hernia Defect - Preoperative vs. Intraoperative



Laterality (%): Unilateral (83.8%) vs. Bilateral (16.2%)

Laterality (%): Unilateral (66.2%) vs. Bilateral (33.8%)

ADI Quartiles Stratified By Duration of Symptoms*



Conclusion

- Many women experienced **symptoms for > 1 year prior to surgical repair**.
- This suggests room for improvement in **maintaining a high index of suspicion** for groin symptoms in women, and a need for **earlier surgical referral.**
- Non-palpable, occult contralateral, and femoral hernia defects was relatively high, **supporting the application of minimally invasive techniques.**

Future Implications

- Future **qualitative studies** are needed to more thoroughly assess the **female experience with groin hernias**.