

Inguinal Hernia: OBSERVATION

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2/13/2012

Outline

- Inguinal Hernias
- Symptoms
- **Observation**
- Why waiting is safe
- Summary



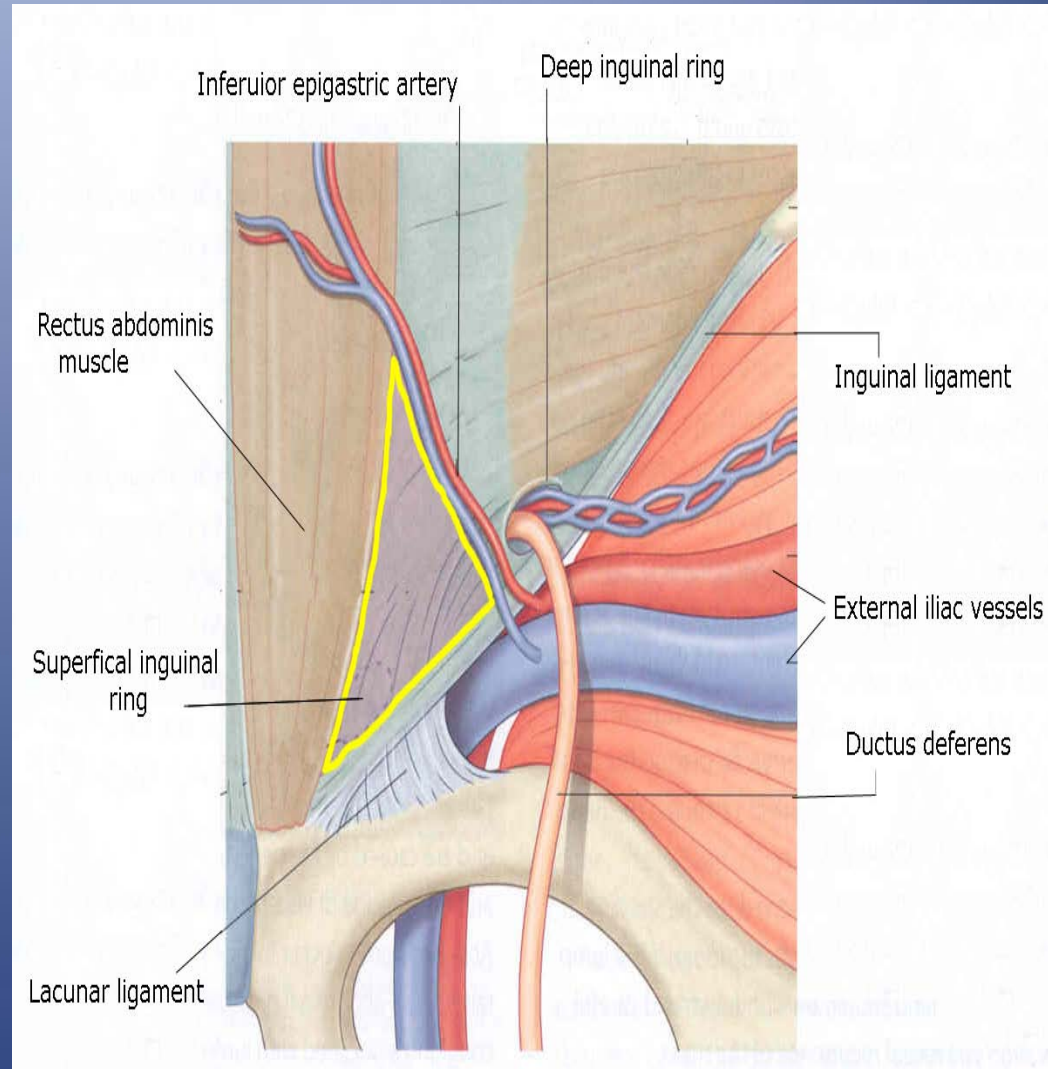
Fig. 1. Contemporary presentation of an inguinal hernia operation, performed by Caspar Stromayr (approximately 1530–1580), who was a German bather-surgeon. The base of the hernial sac is purse-string-ligated with a curved needle [3].

Overview

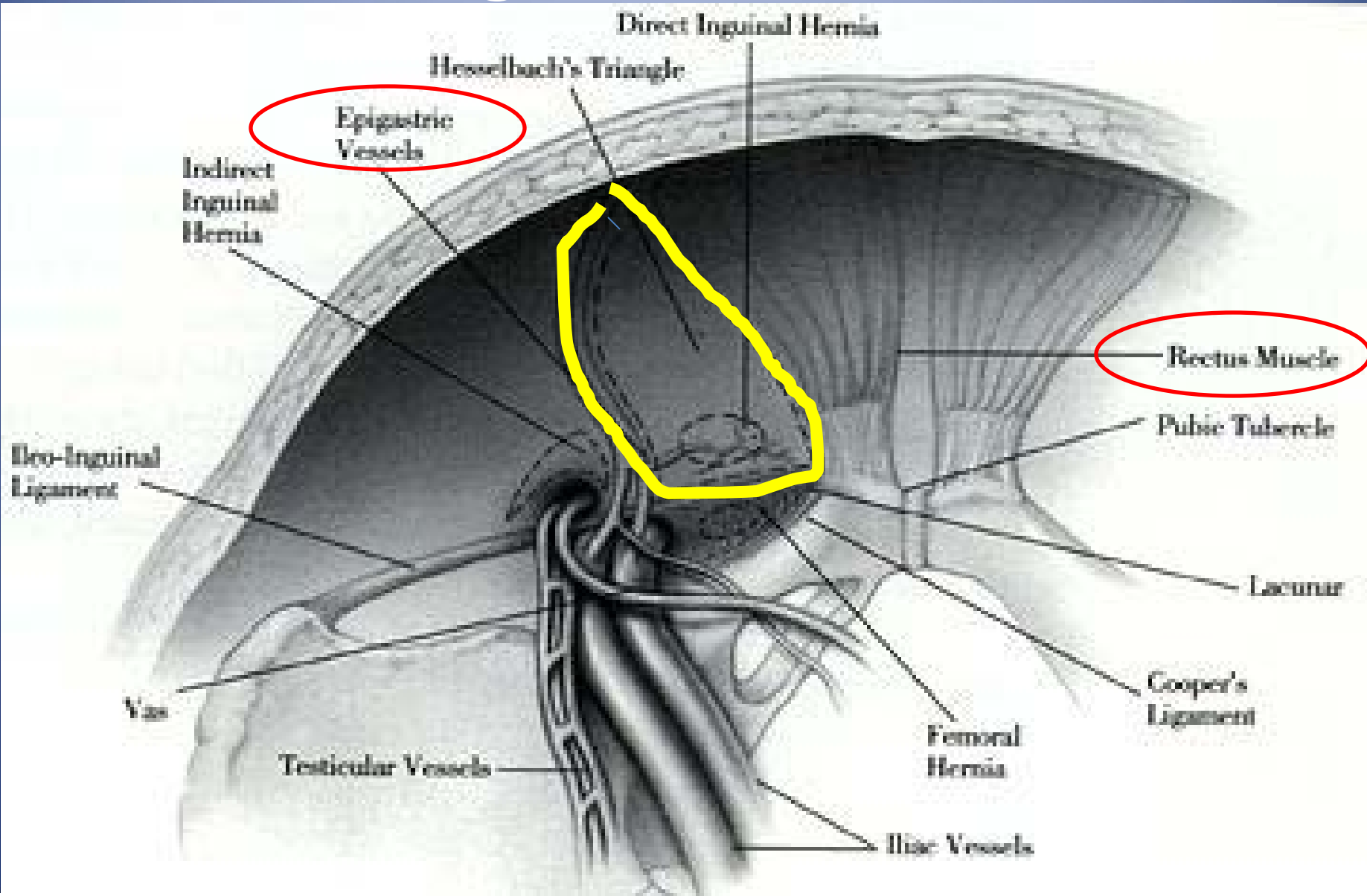
- 20 million groin hernias repaired worldwide
- 10–15% of all general surgical procedures
- Bulge in groin
- Pain on cough, exercise, and rest
- Risk of incarceration and/or strangulation
- Repair risks
 - Chronic pain post op (13-37%)
 - Recurrence

Inguinal Hernia

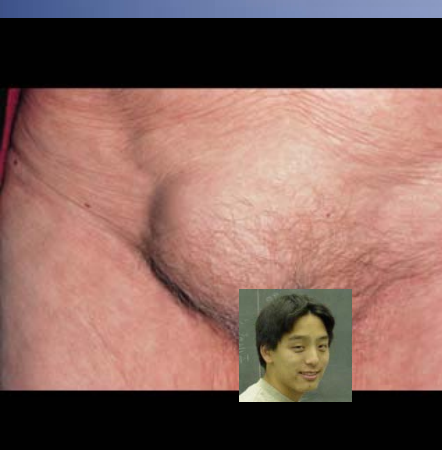
- Direct
 - Weak point in the fascia
 - Hesselbach's triangle
- Indirect
 - through the inguinal ring
 - failure of embryonic closure of the inguinal ring



Inguinal Hernia



Images of Inguinal Hernias



Is the hernia symptomatic?

- Most common:
 - Pain
 - Limitations of activities



Is surgical repair of an asymptomatic groin hernia appropriate?

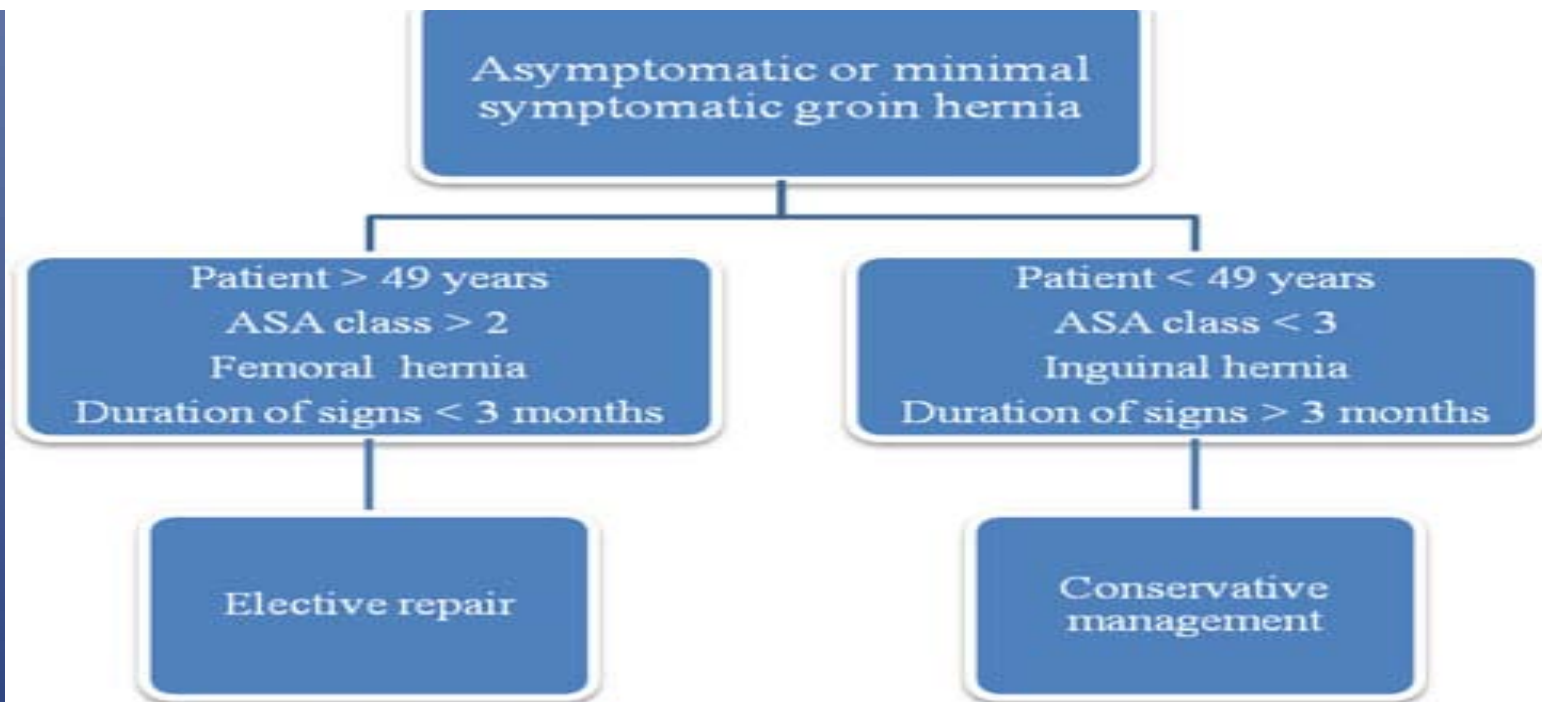
A review

B. van den Heuvel · B. J. Dwars · D. R. Klassen ·
H. J. Bonjer

- Review of the Literature
- Goal: To evaluate appropriateness of surgery in asymptomatic hernia
- Main reason for repair: Risk of incarceration
- Results
 - Risk of incarceration 4/1000
 - Recurrence of tension free vs emergent is the same
 - No real difference in pain
 - No advantage in cost effectiveness

Is surgical repair of an asymptomatic groin hernia appropriate? A review

B. van den Heuvel · B. J. Dwars · D. R. Klassen ·
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Conclusion Watchful waiting for asymptomatic groin hernias is a safe and cost-effective modality in patients who are under 50 years old, have an ASA class of 1 or 2, an inguinal hernia, and a duration of signs of more than 3 months.

Is waiting safe????

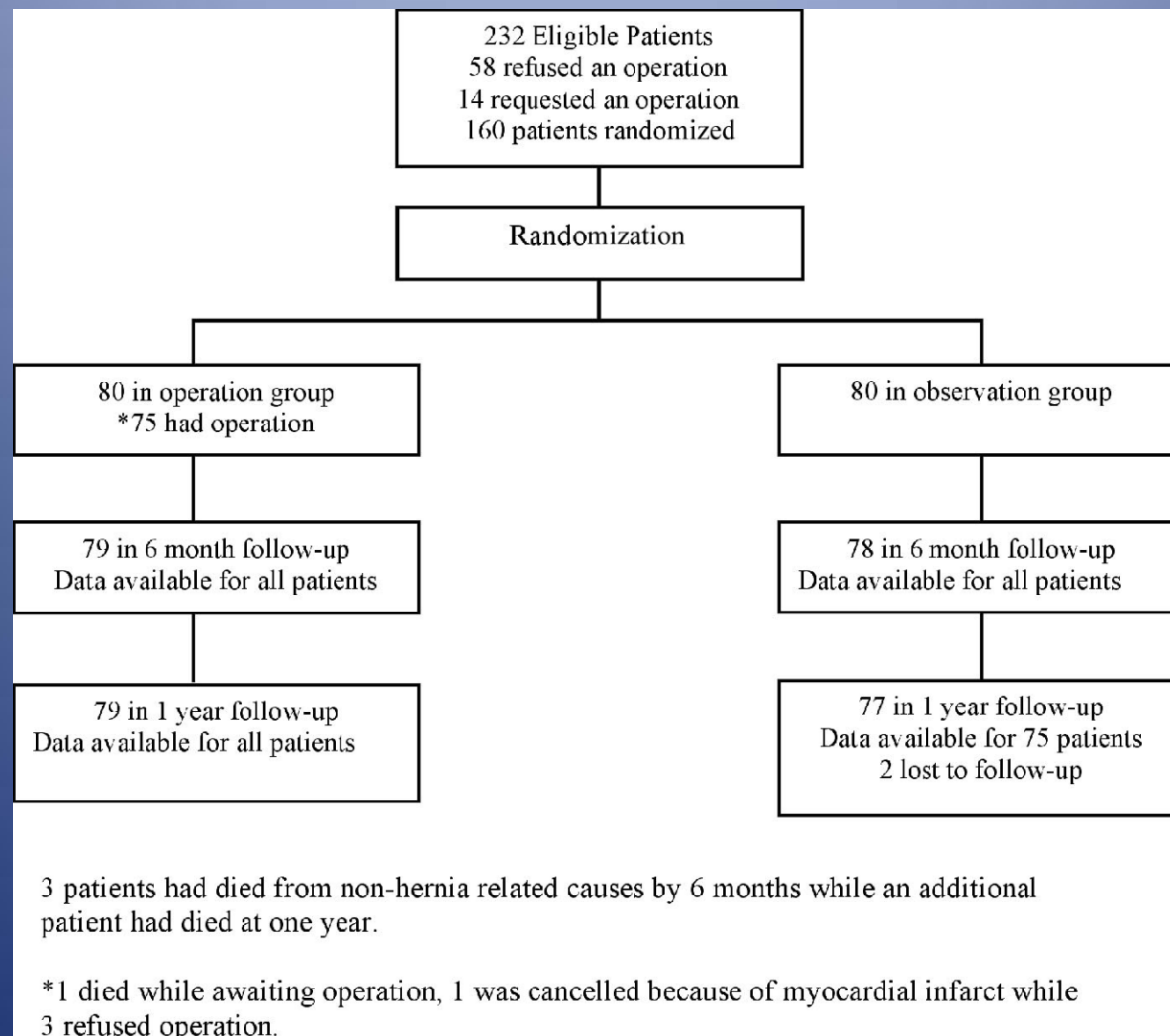
- This is the spot where Dr. James will put a cute picture of his new baby to draw attention away from the debate...



Observation or Operation for Patients With an Asymptomatic Inguinal Hernia

A Randomized Clinical Trial

Patrick J. O'Dwyer, FRCS,† John Norrie, MSc, Ahmed Alani, FRCS,‡ Andrew Walker, PhD,**



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TABLE 2. Pain Scores at Rest and at Movement at Baseline, 6 Months, and 12 Months

Pain Measure	Observation		Operation		Model	Mean Difference [Operation – Observation (95% CI)]	P
	n	Mean (SD)	n	Mean (SD)			
At rest							
Baseline	80	2.0 (3.0)	80	2.0 (2.9)	—	—	—
6 mo	78	8.0 (14.0)	79	4.8 (10.7)	A	−3.2 (−0.7, 7.1)	0.11
					B	−3.3 (−0.2, 6.8)	0.062
12 mo	75	3.7 (8.2)	79	5.2 (12.3)	A	1.6 (−1.6, 4.8)	0.34
					B	1.4 (−1.7, 4.5)	0.38
At movement							
Baseline	80	2.3 (3.0)	80	2.4 (3.1)	—	—	—
6 mo	78	10.9 (16.0)	79	6.1 (11.9)	A	−4.8 (−9.2, −0.3)	0.036
					B	−5.0 (−9.1, −0.9)	0.018
12 mo	75	7.6 (15.0)	79	5.7 (11.5)	A	−1.9 (−6.1, 2.4)	0.39
					B	−2.4 (−6.6, 1.7)	0.25

Models: A, adjusting for relevant baseline pain measurement; B, additional adjustment for analgesia and other baseline covariates.

Watchful Waiting vs Repair of Inguinal Hernia in Minimally Symptomatic Men

A Randomized Clinical Trial

- Study: 720 men (364 watchful waiting, 356 surgical repair)
 - VA population
 - mean age 58
- Methods: Asymptomatic or minimally symptomatic hernia
- Results: intention-to-treat outcomes were similar at 2 years
- 23 % percent of patients assigned to WW crossed over
- 17% assigned to receive repair crossed over to WW
- 1 (one) WW patient (0.3%) experienced acute hernia incarceration without strangulation within 2 years

Watchful Waiting vs Repair of Inguinal Hernia in Minimally Symptomatic Men

A Randomized Clinical Trial

- Pain limiting activities
 - 2% in OR group
 - 5% in WW group
- Both with less pain at 2 yrs on VAS

Conclusions Watchful waiting is an acceptable option for men with minimally symptomatic inguinal hernias. Delaying surgical repair until symptoms increase is safe because acute hernia incarcerations occur rarely.

How do we know who will fail WW?



A Clinician's Guide to Patient Selection for Watchful Waiting Management of Inguinal Hernia

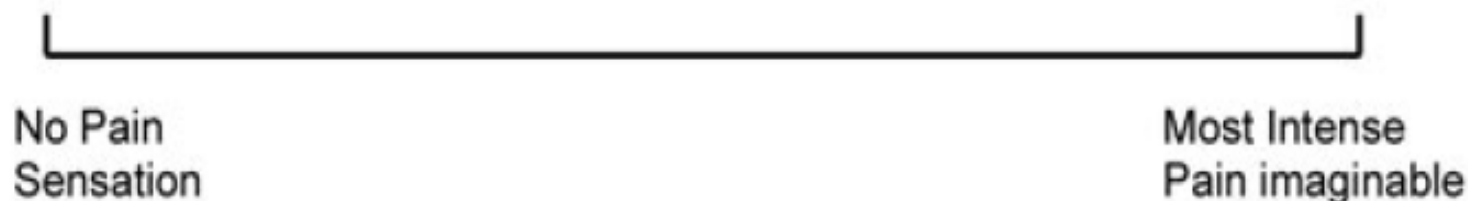
George A. Sarosi, Jr, MD, Yongliang Wei, MS†, James O. Gibbs, PhD‡, Domenic J. Reda, PhD‡, Martin McCarthy, Jr, PhD§, Robert J. Fitzgibbons, Jr, MD¶, and Jeffrey S. T. Barkun, MD***

- Objective: Assist in managing asymptomatic hernias
- 336 patients randomized to Watchful Waiting were reviewed
- Two Outcomes
 - Crossover to surgery
 - Development of hernia pain limiting activities +/- crossover
- Results at 2 yrs
 - 72 crossover to surgery
 - Additional 28 developed pain limiting activities

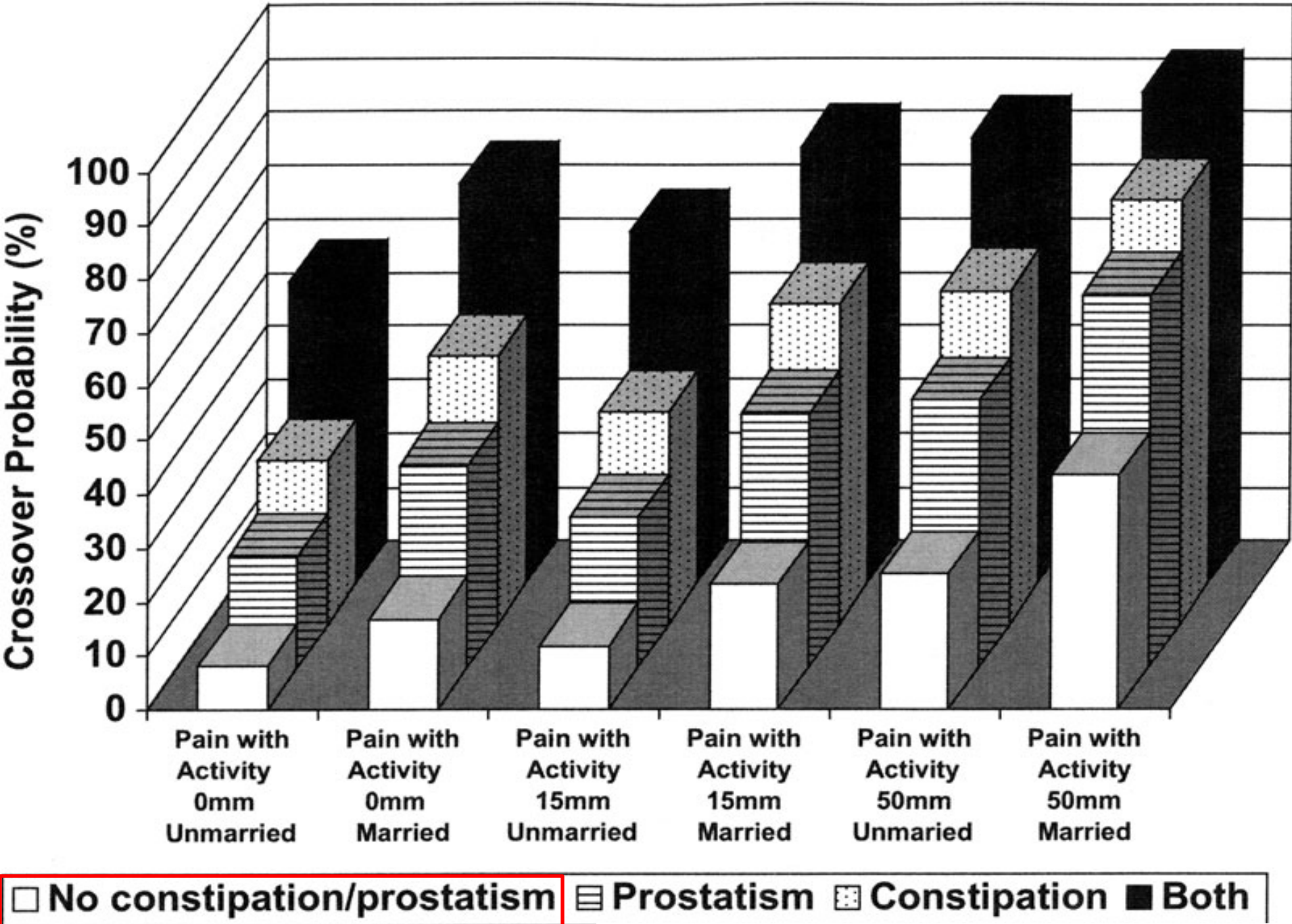
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How much pain or discomfort have you had due to your hernia in the last 24 hours?
Mark on the line with an X to indicate How much pain did you have when you were exercising, having sex, doing strenuous work, or lifting objects you used to lift comfortably?:



2. Does the patient have chronic constipation? ☐ Yes or ☐ No
3. Does the patient report prostatism? ☐ Yes or ☐ No
4. Is the patient married? ☐ Yes or ☐ No



Is it cost effective to fix all hernias?



Tension-Free Repair Versus Watchful Waiting for Men with Asymptomatic or Minimally Symptomatic Inguinal Hernias: A Cost-Effectiveness Analysis

Kevin T Stroupe, PhD, Larry M Manheim, PhD, Ping Luo, PhD, Anita Giobbie-Hurder, MS,

- Assessed costs, quality-adjusted life years (QALY) and cost-effectiveness at 2-years
- Results
 - Surgical repair higher than watchful waiting (\$7,875 vs.\$6,044)
 - Difference of US \$1,831
- The incremental cost-effectiveness ratio
 - which refers to the cost per additional QALY
 - US \$59,065/QALY
- A cost per QALY of approximately US \$50,000 is generally viewed as a reasonable

Summary

- Watchful Waiting is a reasonable option
- Similar pain scores at 2 yr follow-up
- Safe – minimal risk of incarceration
- Cost-effective
- UNLESS:
 - You are married and constipated....