

Open mesh vs laparoscopic mesh repair (2004)

Laparoscopic approach

Less pain

Quicker return to activity

Higher complication rate

Higher recurrence

VAH study

Recurrences

Laparoscopic

10.1%

Open

4.9%

This is a throwback to tissue repairs

VAH study

Lap vs tension free

	Chung 1999 (MA)	Grant 2000 (SR)	VAH Study 2004 (RPS)
No. studies	29	34	
No. pts	2,471	6,804	1,696
Pain mesh/non mesh	<i>Same/less</i>	<i>Less</i>	<i>Less</i>
Return to activity/recovery	<i>Quicker</i>	<i>Quicker</i>	<i>Quicker</i>
more serious complications(rare)		<i>Greater</i>	<i>Greater</i>
Complications		<i>Same</i>	<i>Higher</i>
Recurrence	<i>Same</i>	<i>Same</i>	<i>Higher</i>

Laparoscopic vs Open: Meta-analysis (2000)

Grant A. Laparoscopic compared with open methods of groin hernia repair: systematic review of randomized controlled trials Br J Surg, 87(7).2000;860-867

34 trials analysed:

Recurrences

	Lap	Open
TAPP v mesh	2%	2.1%
TAPP vs non-mesh	2.1%	3.6%
TEP vs mesh	2.2%	1.4%
TEP vs non-mesh	2.8%	4.8%
Misc lap vs open	1.7%	0.2%
Total	2.3%	2.9%

VAH study

Fitzgibbons RJ. (1995) Laparoscopic inguinal herniorrhaphy: Results of a multicenter trial. Annals of surg. Vol.221, no.1,3-13

Multicenter trial

19 institutions: private and university

869 hernias (686 pts)

TAPP, IPOM, TEP

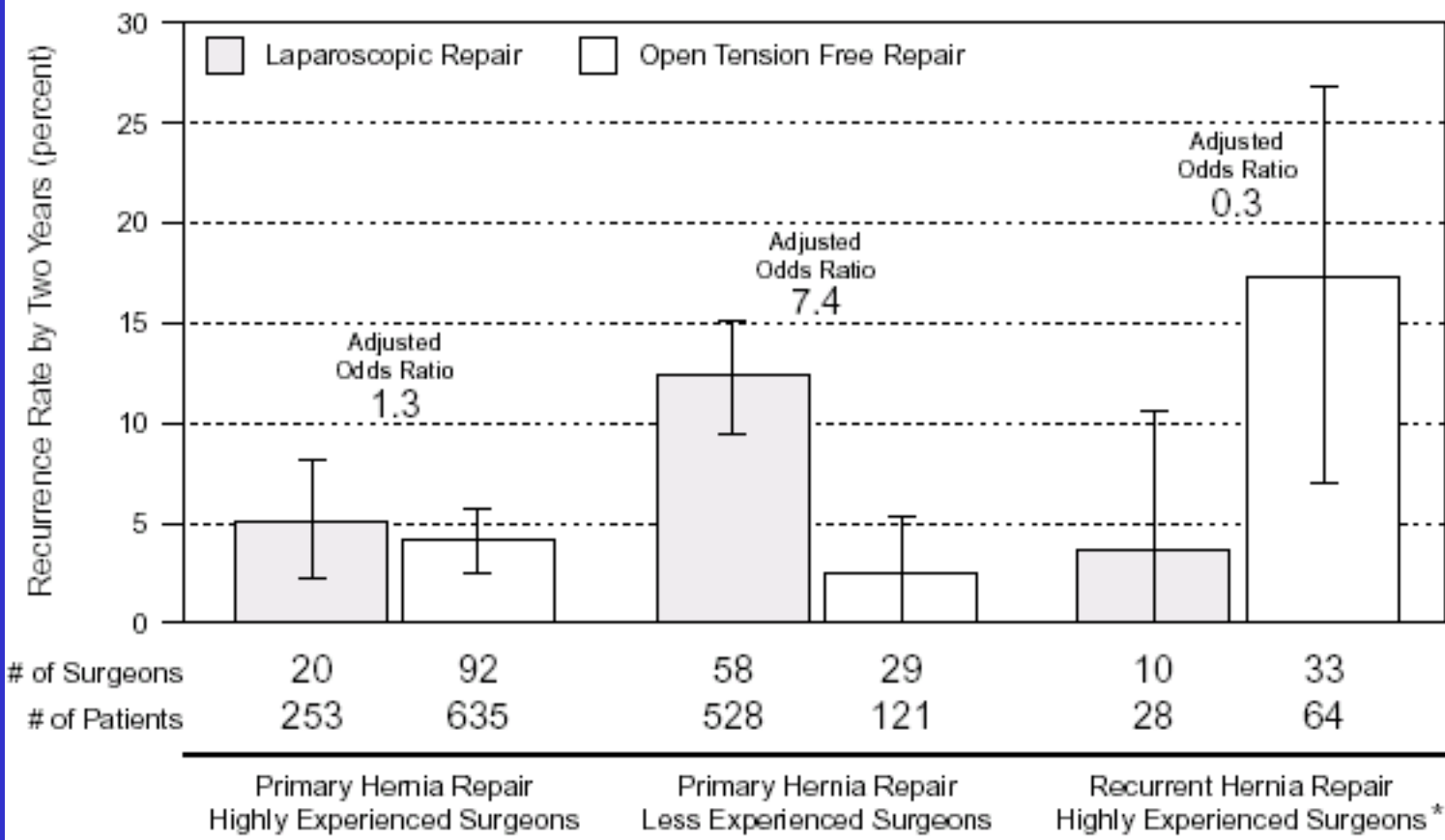
Recurrences

All: 4.5%

TAPP (562): 5.0%

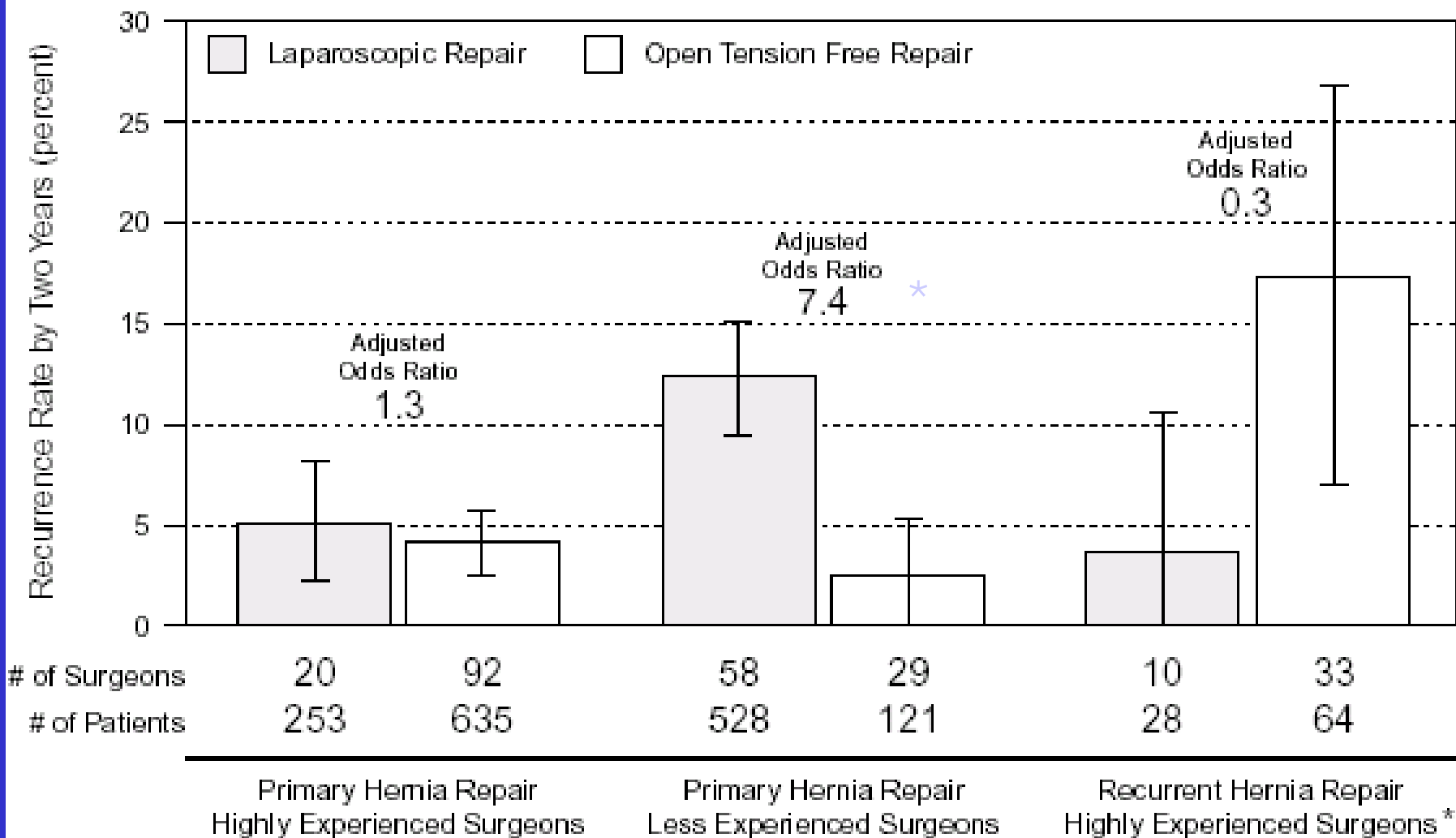
IPOM (217): 5.1%

TEP (87): 0



Surgeons	Lap	Open
Highly exp	20 (26%)	92 (76%)
Less exp	58 (74%)	29 (24%)
Total	78	121

VAH study



* There were insufficient numbers of patients with recurrent hernias repaired by surgeons with less experience to make meaningful comparisons.

High recurrence

Observations:

More than meta-analysis studies

More than reported (experts <1%)

As high or higher than tissue repairs

Possible explanations:

Early on the learning curve

Fewer experienced lap surgeons

Technique: standardized vs non-standardized

The laparoscopic approach is more difficult

Why the high rates of recurrence?

- **What are the details of the laparoscopic technique used?**
- **Did you analyze the reasons for recurrence?**
- **Are we doing a good job of teaching hernia repair?**

Technique used

18. Amid PZ. Lichtenstein open tension-free hernioplasty. 1997 video in Am Coll Surg Educational Library
20. Smith CD. Inguinal herniorrhaphy: posterior buttressed mesh repair via laparoscopy (TEP). 1997 video in Am Coll Surg Educational Library CC-1866.
21. Fitzgibbons RJ Jr. Preperitoneal laparoscopic inguinal herniorrhaphy. 1997 video in Am Coll Surg Educational Library CC1871.

It is mechanically sound

*"The operation is commonly called by the descriptive term 'Unilateral GPRVS' because it uses the concept, principles, and techniques of the Stoppa procedure.... **When correctly done, recurrences are inconceivable**"*

George Wantz 1994
(in Contemporary Surgery)
Vol. 44(2):83-89

