

LONG-TERM FOLLOW-UP AFTER PELVIC ORGAN PROLAPSE OPERATIONS: RESULTS AND NEED FOR REOPERATION

Hypothesis / aims of study: There are large variations in the reported frequency of relapse and need for subsequent treatment after pelvic organ prolapse (POP) surgery. Operating techniques differ greatly between centers and countries. The use of mesh in POP repair is increasing, with reported low reoperation rates due to relapse, but with increased reoperation rate due to complications such as erosion. We hypothesized that traditional vaginal repair, such as the Manchester procedure (including repair of all 3 vaginal compartments), result in low POP reoperation rates, acceptable complication rates and a high percentage of cured patients without subjective symptoms.

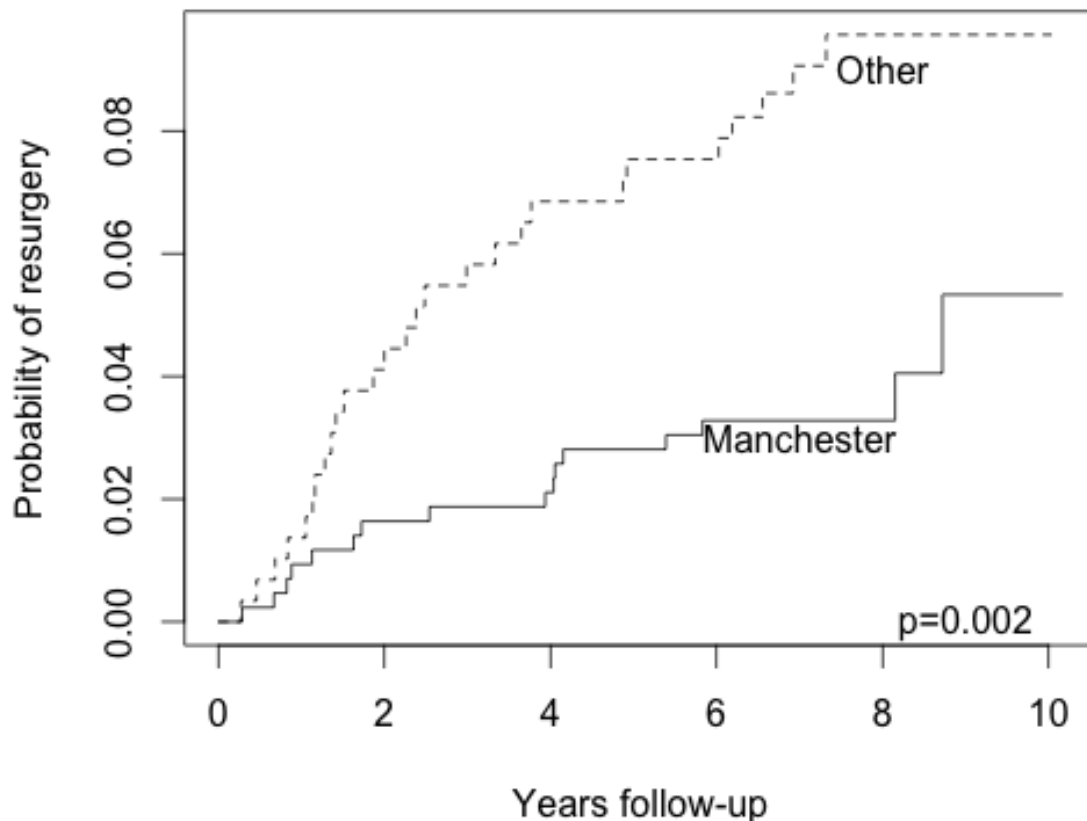
Study design, materials and methods: From 2002 the POP operated patients in our department were registered prospectively in an internal quality control database, and were scheduled for an outpatient follow-up after 1 year. We performed a retrospective review of the 1 year subjective and objective results for those operated from 2002 to 2005, and revised the electronic medical records up to 2012 for information on relapse in need of treatment. A telephone interview was performed during 2011-12 to obtain information on relapses treated in other centers. Women complaining of new POP symptoms were offered an outpatient evaluation. The cumulative incidence for reoperation was calculated.

Results: Between 2002 and 2005, 726 patients (median age of 67 years at operation) were operated in our department for POP. The majority were primary operations (91%; 663/726) and 59% (431/726) were Manchester operations. The other procedures were: 184 partial repairs, 32 colpocleisis, 27 vaginal hysterectomies, 25 sacrospinous fixations, 20 sacrocolpopexies and 7 operations with mesh. At their 1 year control, 94 % (681/726) of the patients attended, 5% (36/726) were lost to follow-up and 1% (9/726) were dead of other causes. The table shows objective findings and subjective symptoms at 1-year follow-up.

	N	Manchester N=428	Other N=294	Test Statistic
Age	718	56 67 75	57 67 77	$F_{1,716}=0.44, P=0.507^1$
Preop stage : Stage I	712	2% (10)	3% (10)	$\chi^2=22.54, P<0.001^2$
Stage II		34% (145)	32% (93)	
Stage III		58% (243)	49% (142)	
Stage IV		5% (23)	16% (46)	
Postop stage : Stage 0	660	53% (204)	50% (137)	$\chi^2=11.17, P=0.025^2$
Stage I		34% (133)	28% (75)	
Stage II		10% (37)	15% (40)	
Stage III		4% (14)	7% (19)	
Stage IV		0% (0)	0% (1)	
Incontinence : None	679	91% (365)	87% (244)	$\chi^2=3.81, P=0.282^2$
Urge		5% (20)	8% (21)	
Stress		3% (12)	5% (14)	
Mix		1% (2)	0% (1)	
Voiding difficulty : None	678	87% (346)	83% (232)	$\chi^2=1.67, P=0.434^2$
Minimal		12% (47)	15% (42)	
Severe		2% (6)	2% (5)	
Defecation difficulty : None	676	90% (355)	79% (222)	$\chi^2=17.29, P<0.001^2$
Minimal		9% (34)	18% (50)	
Severe		1% (5)	4% (10)	
Sexual dysfunction : Yes	670	9% (35)	9% (26)	$\chi^2=0.04, P=0.851^2$
Surgeon : Resident	721	36% (154)	20% (60)	$\chi^2=21.67, P<0.001^2$
Urogynecologist		50% (212)	59% (172)	
Gynecologist		14% (61)	21% (62)	
Complications : None	698	91% (376)	90% (257)	$\chi^2=3.54, P=0.315^2$
Hematoma		5% (20)	5% (14)	
Infection		1% (3)	2% (7)	
Other		3% (12)	3% (9)	
Subjective evaluation : Improved	683	98% (393)	96% (271)	$\chi^2=3.8, P=0.051^2$
Unchanged		2% (7)	4% (12)	
Deteriorated		0% (0)	0% (0)	

¹ Wilcoxon test; ² Pearson test

The figure shows cumulative incidence of reoperation for the total patient group vs the Manchester group, demonstrating a low probability for reoperation in both groups. However, reoperation rates were significantly lower in the Manchester group ($p=0.002$)



Interpretation of results: The 1-year follow up after POP operations show high subjective and objective satisfaction. The risk of reoperation was low, especially among those operated with a Manchester procedure. The rate of reoperation was constant in the ensuing postoperative years. Whether reoperations after several years are de novo POP due to weakened connective tissue support by advancing age or represent failures of the first operation, is debatable.

Concluding message: Traditional POP operating techniques result in low reoperation rates and high subjective satisfaction. A constant reoperation rate over the postoperative years indicates that long-term follow-up is preferable in studies evaluating different types of vaginal repair.

Disclosures

Funding: None **Clinical Trial:** Yes **Public Registry:** No **RCT:** No **Subjects:** HUMAN **Ethics Committee:** The study is exempt from IRB at the Regional level (Regional Committee for Medical Research Ethics), but has been evaluated and approved according to institutional rules. The study is evaluated as an internal clinical quality control study and the Oslo University Hospital personal data officer has approved the study. **Helsinki:** Yes **Informed Consent:** No