

The outcome of Sacrocolpopxy/Sacrohyteropexy for patients with pelvic organ prolapse and predictors of anatomical failure

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Introduction

Pelvic organ prolapse (POP) is a medical condition that profoundly impacts women's quality of life [1]. It is prevalent in 20%-30% of women over the age of 20 years worldwide [2–5].

In Saudi Arabia, a cross-sectional study of over 2000 women showed a prevalence of 23.4% [6].

Sacrocolpopexy is the standard procedure for apical prolapse correction with a higher success rate, lower recurrence rate, and less dyspareunia than the vaginal approach [7,8],

Unfortunately, the literature lacks long-term predictors and risk factors for its recurrence.

Aim

this study aimed to assess the efficacy and safety of Sacrocolpopexy, and to identify

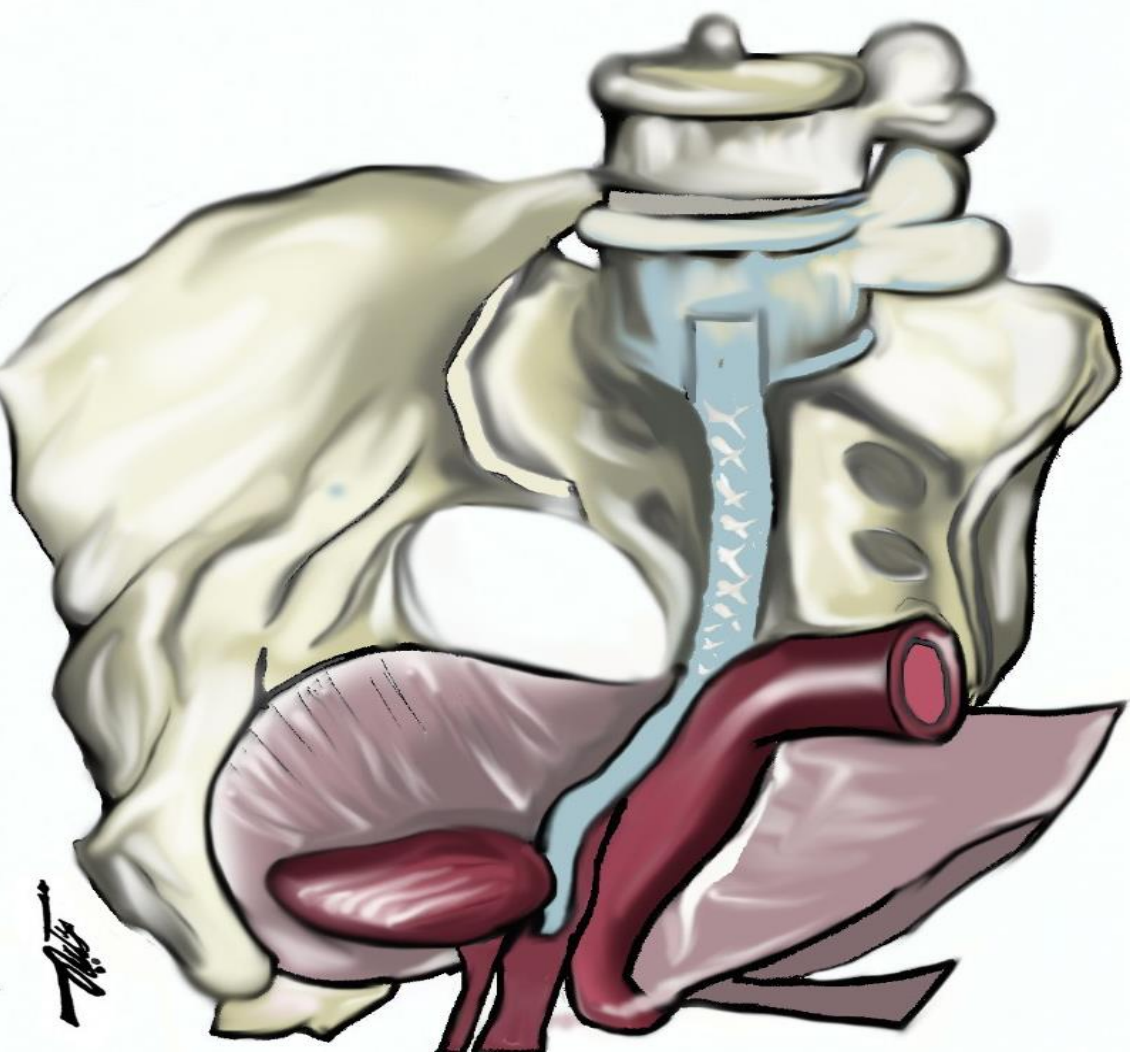
the predictors of recurrence in a Saudi setting.

Method

- A retrospective cohort study
- It was conducted at King Abdulaziz Medical City in Riyadh.
- All patients (**n=200**) who underwent Sacrocolpopexy between 2009 and 2021.
- One urogynecologist performed all cases using a standardized technique

Success was estimated by using the equation

(The preoperative percentage of cases with prolapse degree of 0 and 1 minus the postoperative percentage of patients with prolapse degree of 0 and 1) / the preoperative percentage of subjects with prolapse degrees of 0 and 1].



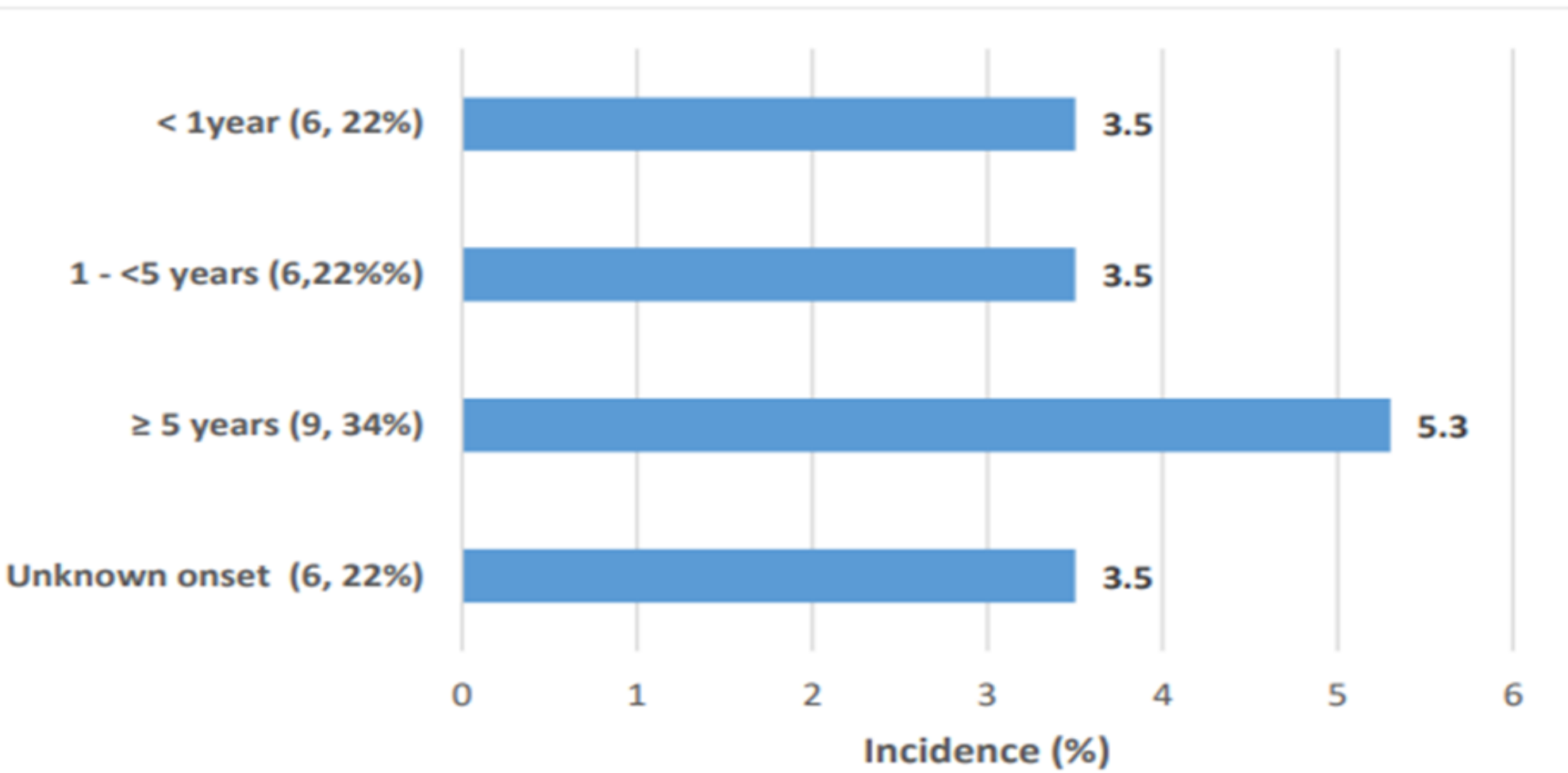
Surgical technique:

- Bladder dissection is carried out to the level of the trigone Polypropylene mesh was attached to the anterior vaginal wall using Ethibond suture.
- Following, mesh is fixed to the cervix using 1-2stitches of Ethibond sutures
- Then, the mesh was fixed to the longitudinal intervertebral ligament using one stitch of Ethibond suture.

Results

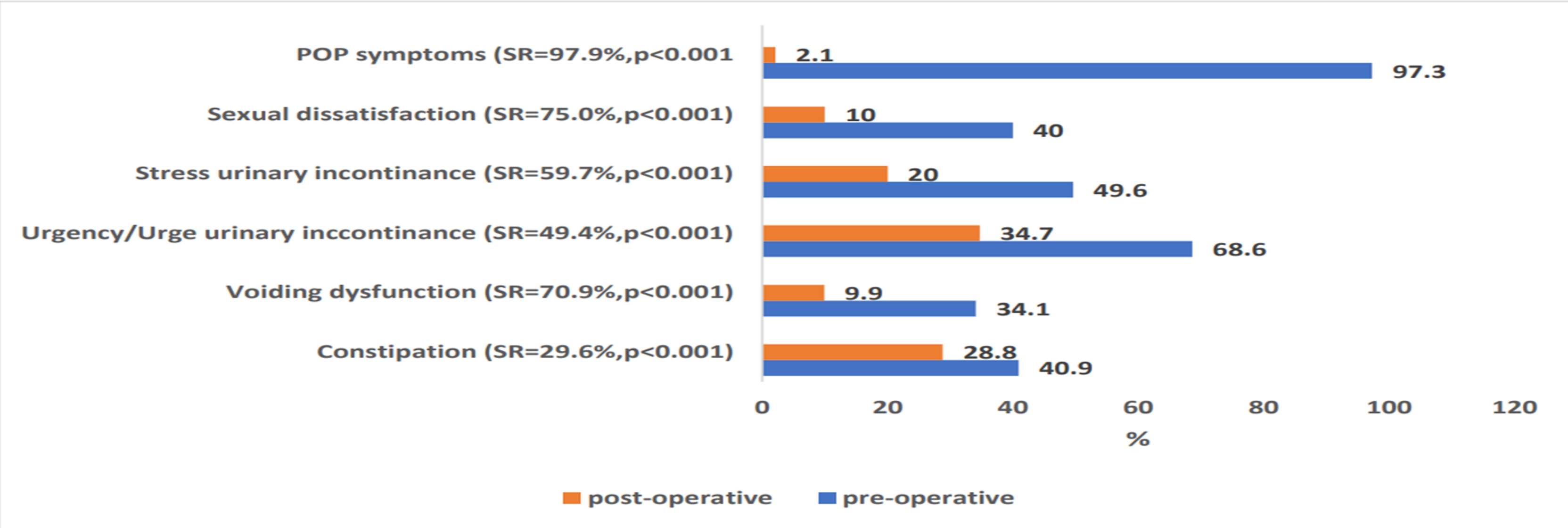
Rate of POP anatomical failure before and after Sacrocolpopxy and surgery Success rate.

Vaginal Compartment	Preoperative rate (n=200)	POP Postoperative failure rate (n=27)	Success Rate (%)
	No (%)	No (%)	
Anterior compartment	166 (89.2)	5 (2.9)	96.8
Grade [Median (IQR)]	3 (2,4)	0 (0,1)	P-value <0.001*
Apical compartment	170 (100)	1 (0.6)	99.4
Grade [Median (IQR)]	3 (2,4)	0 (0,1)	P-value <0.001*
Posterior compartment	144 (91.1)	23(13.5)	85.2
Grade [Median (IQR)]	2 (2,3)	0 (0,1)	P-value <0.001*



The overall failure rate was 15.9%, with an incidence density of 5.98 per 100 women-years. The onset of failure in 27 failure cases ranged from 40 days to 11.5 years postoperative.

Preoperative and Postoperative Symptoms Associated with Pelvic Organ prolapse and Success rate of Scarocolpopexy [SR= success rate].



Logistics regression analysis of the predictors of anatomical failure (recurrence /persistence) after Sacrocolpopexy

After adjustment for the possible potential confounders, older age (OR=1.06,95%CI:1.01–1.12, p=0.019) and the presence of diabetes (OR=5.57,95%CI:1.76–17.62,p<0.003) were the only significant predictors of operation failure.

	β	SE	P-value	OR (95% CI)
Age (years)	0.06	0.03	0.04*	1.06 (1.01–1.12)
Diabetes mellitus	1.64	0.65	<0.01*	5.14(1.43–18.49)
Posterior repair	-1.05	0.61	0.08	0.35 (0.11–1.15)
Constant	-4.53	1.43	0.001	0.01

Conclusion

The outcomes of Sacrocolpopexy/Sacrohyteropexy in our study are comparable to those in previous studies. Diabetes and elder age at the time of the surgery played a role in predicting recurrence. Sacroclpopexy has a long-term profile of safety and efficacy. These findings could be key to stratifying surgical plans for pelvic organ prolapse cases.