	APVR			VPVR			LPVR			
Symptoms	Preop n=20	Post n=18	p	Preop n=20	Post n=19	p	Preop n=5	Post n=5	p	
Prolapse or bulge	20 (100%)	1(5.56%)	<0.01	20 (100%)	(0%)	<0.01	5 (100%)	2 (40%)	>0.05	2.58
SUI	3 (15%)	0 (0%)	<0.05	4 (20%)	0 (0%)	<0.05	0 (0%)	0 (0%)	-	-
Voiding dysfunction	13 (65%)	0 (0%)	<0.01	14 (70%)	(0%)	<0.05	2 (40%)	0 (0%)	<0.05	-

1016

Hosni M M[1], El-Feky A[1], Agur W[2], Khater E[1]
1. *Ain Shams, Egypt,* ***2.*** *NHS Ayrshire & Arran*

WHICH SURGICAL APPROACH IS BETTER IN REPAIRING PARAVAGINAL DEFECTS IN PATIENTS WITH ANTERIOR COMPARTMENT PROLAPSE? AN OBSERVATIONAL STUDY

Hypothesis / aims of study
Paravaginal defects have been shown to account for 80% of anterior compartment defects in patients with symptomatic pelvic organ prolapse (POP) (1). Paravaginal repair may offer a better chance of a more effective treatment of anterior compartment defects (2) (3). The objective of this study is to evaluate the effectiveness of abdominal (APVR), vaginal (VPVR) and Laparoscopic (LPVR) paravaginal repairs in the surgical correction of paravaginal support defects in patients with anterior compartment prolapse.

Study design, materials and methods
Forty five women with primary symptomatic anterior vaginal wall prolapse, associated with paravaginal support defects were recruited to the study. All patients were assessed subjectively (by the presence of the symptom of lump coming down that is significant enough to warrant surgery) and objectively using the Pelvic Organ Prolapse Quantification score (POPQ).
Patients were assigned to the vaginal group when there was defects in more than one compartment or if vaginal hysterectomy was indicated. They were assigned to the abdominal group if there was coexistent abdominal pathology or colposuspension was indicated. They were assigned to the laparoscopic group if the body mass index was less than 30 kg/m² and there was no history of previous pelvic operations. Concomitant surgery (for prolapse in a different department or for incontinence) was performed when necessary and operation timing was accounted for separately. Patients of the three groups were followed up for a period of 6-12 months. Follow up appointment included symptoms of recurrence prolapse, occurrence of complications as well as the POPQ scoring. Statistical analysis performed using Chi – square, Mcnemar, student t- and one-way ANOVA tests.

Results
Twenty patients had the procedure abdominally (APVR), 20 had the procedure vaginally (VPVR) while only 5 patients had the laparoscopic approach. There were no significant differences between women of the three groups with regards to age, parity, weight and BMI. The cure rate was symptomatically and anatomically improved equally in APVR and VPVR ($p>0.05$). Table 1 shows the pre- and post-operative symptoms in the 3 groups. Table 2 shows a comparison of POPQ scores pre- and postoperatively in the 3 groups.
The mean operative time in hours was significantly longer (1.6±0.7 in APVR, 1.82±0.7 in VPVR and 3.7±1.7 in LPVR), the post operative hospital stay was not significantly different (3.2±3 in APVR, 2.95±2.18 in VPVR and 4.2±3.42 days in LPVR) and the degree of improvement in prolapse stage was even less than the other two approaches.

Interpretation of results
The abdominal and vaginal approaches offered comparable results both subjectively and objectively. The laparoscopic approach had to be abandoned after the 5th patient as it was time-consuming, did not confer any extra benefit to patients or healthcare service as well as a perception of the surgeon of unrealistic learning curve period.

Concluding message
Paravaginal repair is an effective procedure in correcting lateral defects responsible for anterior compartment prolapse. In our experience, the LPVR does not offer any advantage over the abdominal or vaginal routes. Vaginal approach is highly successful but technically challenging operation. The choice of the surgical route should be based on surgical indications, patient's needs, surgeon preference and available training.

Sexual problems	18 (90%)	1(5.56%)	<0.01	18 (90%)	2 (10.53%)	<0.01	5 (100%)	1 (20%)	<0.01	2.74
UTI		0 (0%)	<0.05	2 (10%)	1(5.27%)	<0.05	0 (0%)	0 (0%)	-	2.11

Table 1 Pre- and post-operative symptoms in the 3 groups

	APVR		**VPVR**		LPVR
POPQ staging	Preop (n=20)	Post (n=18)	Preop (n=20)	Post (n=19)	Pre (n=5)
Stage 0	-	7(38.88%)	-	9(47.37%)	-
Stage I	-	10(55.55%)	-	8(42.12%)	-
Stage II	18(90%)	1(5.55%)	12(60%)	2(10.53%)	5(100%)
Stage III	1(5%)	-	2(10%)	-	-
Stage VI	1(5%)	-	6(30%)	-	-
	X^2=10.9 and p<0.05		X^2=15.2 and p<0.05		X^2=1.11 and p>0

Table 2 Comparison of POPQ scores pre- and postoperatively in the 3 groups.

References

1. Clinical Obstet and gynecol 1993; 36 (4): 939-51
2. Urology 2000 ; 56 (6A) : 64-9
3. Am J Obstet Gynecol 1994; 171:1429-39

Specify source of funding or grant	**Local Hospital Funding**
Is this a clinical trial?	**Yes**
Is this study registered in a public clinical trials registry?	**No**
Is this a Randomised Controlled Trial (RCT)?	**No**
What were the subjects in the study?	**HUMAN**
Was this study approved by an ethics committee?	**Yes**
Specify Name of Ethics Committee	**Ain Shams University Scientific Committee**
Was the Declaration of Helsinki followed?	**Yes**
Was informed consent obtained from the patients?	**Yes**