

# INHERITANCE OF PELVIC ORGAN PROLAPSE

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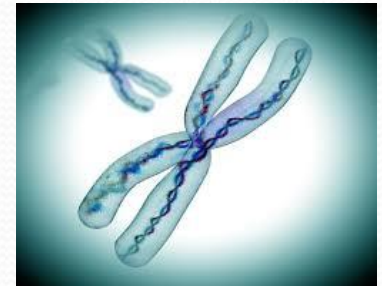
# AIM OF THE STUDY

- Besides many other factors, inherited risk factors are also considered to play an important role in the development of pelvic organ prolapse (POP).



# GENETIC COMPONENTS OF POP

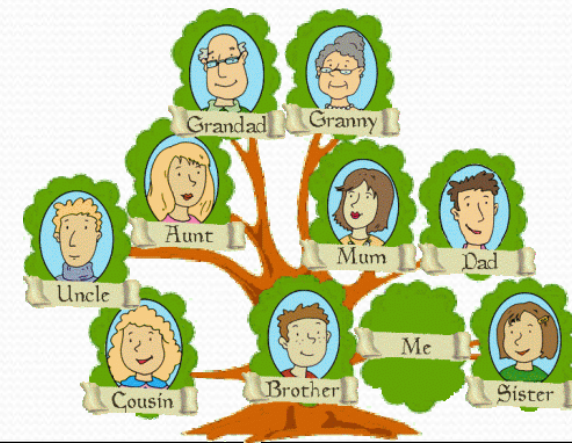
- TWIN STUDIES
- GENE LOCUS (Polymorphism)
- SEGREGATION ANALYSES
- LINKAGE STUDIES
- FAMILY STUDIES



In order to investigate the role of genetic components, we evaluated the family history of patients with POP in this study.

# PATIENTS AND METHODS

- The family history of 38 patients with POP (stage  $\geq 2$ ) and 27 controls (stage  $\leq 1$ ) were evaluated.
- At least 3 successive generations were investigated by Pedigree Method and Chi-square test was used for statistical analysis.





# RESULTS

- As a result, Fifteen patients were found to have a family history of POP (39.5 %). In the age-matched control group, none had a family history of POP ( $p < 0.05$ ).

Pedigrees



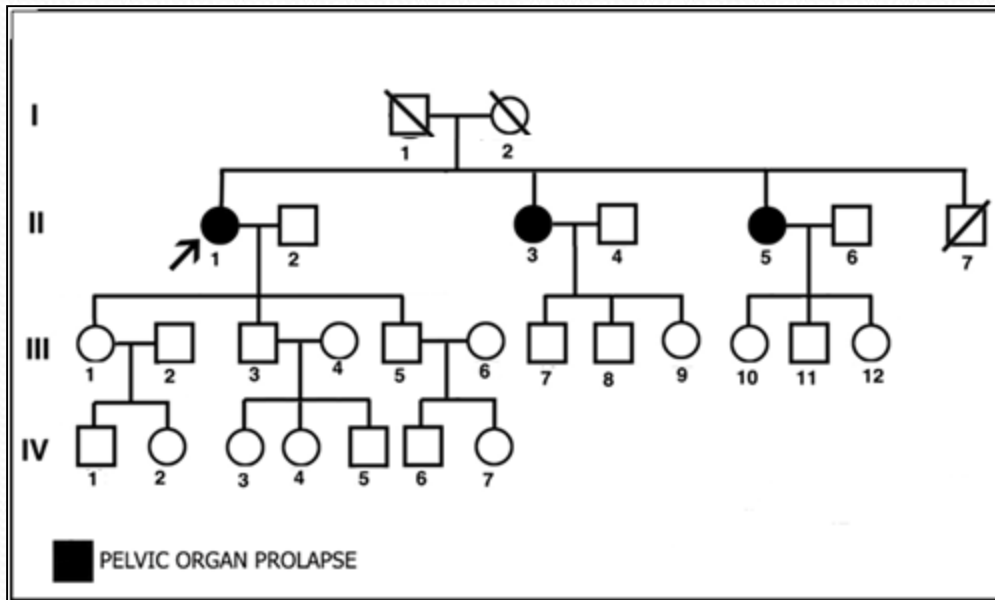
## The family members of probands that are also affected with POP or Hernia

	<i>Proband</i>	<i>Mother</i>	<i>Aunt</i>	<i>Sister</i>	<i>Daughter</i>	<i>Uncle/ Brother</i>	<i>Father</i>	<i>Others</i>
1	MT*	x			x			
2	UN*	x						
3	HB*			x				
4	ŞA*			x				
5	SU*	x						
6	GK*			x				
7	RG*			x				
8	CA*	x						
9	SA*							x
10	SA*							x
11	ND*			x x				
12	LÇ*							x
13	HD*	x	x x			x *	x *	
14	NŞ*	x	x					
15	ŞY*	x						

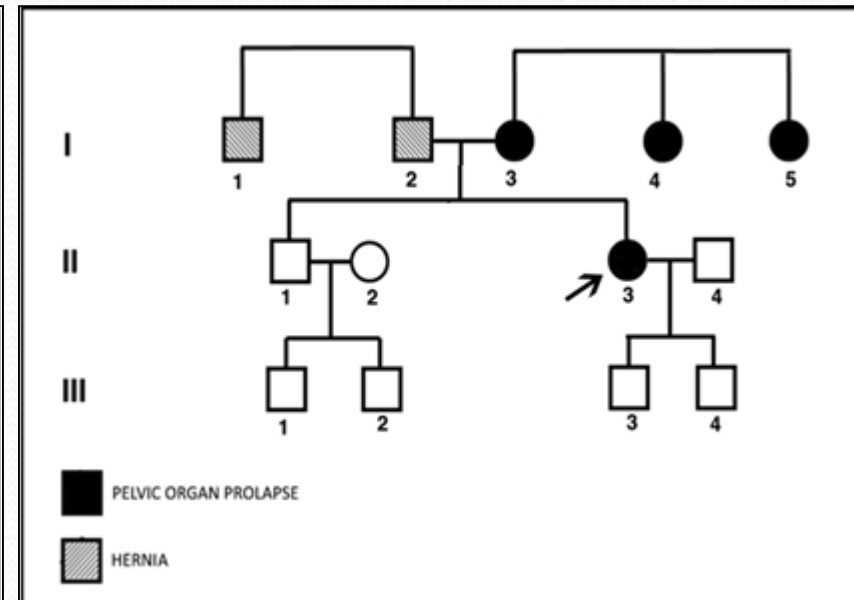
x : POP

x\* : Hernia

# Pedigrees of POP Families



Family 11  
Probands' Age : 74



Family 13  
Probands' Age : 29



# CONCLUSIONS

- The suggestion of familial transmission with autosomal dominant or multifactorial inheritance in POP patients is in consistence with our findings.
- The improved understanding of molecular basis of POP and identifying potential molecular markers obtained from family studies may be used in appropriately counselling women predisposed to POP and in the prevention of the disease.
- Therefore; the hereditary role
- should be estimated in the management of POP patients.

**THANK YOU.....**