

FV-LEIDEN AND FII-G20210 FOR SPONTANEOUS ABORTIONS. PHYSICIANS KEEP ASK FOR THE TESTS!

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Problem Statement

- Recurrent pregnancy loss (RPL) is described as ≥ 3 first trimester consecutive spontaneous miscarriages. Many etiological factors have been proposed including inherited and acquired thrombophilia.
- According to current guidelines, in RPL screening for antiphospholipid antibodies (APLAs) is recommended whereas screening for inherited thrombophilia mutations is unnecessary, unless a personal or family history of venous thromboembolism event (VTE) is present.

Method

- We performed a retrospective analysis of 275 women with miscarriages who were tested for the presence of APLAs and FV-Leiden or FII-G20210A mutations.

WOMEN CHARACTERISTICS		ABORTIONS		
Median age	35 years	Number		
VTE HISTORY		Median 2		
Before conception	8 %	1 abortion	35.6%	
Antepartum	2.5%	2 abortions	41.1%	
Postpartum	1.5%	3 abortions	13.1%	
Family History	38.9%	>3 abortions	10.2%	
Other risk factors	48.7%	Trimester	1 st	86.5%
Obstetric			2 nd	4.4%
Complications	8 %		3 rd	1.8%
Stillbirth	3.3%		Different	7.3%

Results

- The results showed APLAs in 12.4%, heterozygosity for FV-Leiden in 6.9%; for FII-G20210A in 5.5%; and combined heterozygosity in 0.7%.
- The number of miscarriages was associated with APLAs ($p=0.048$), obstetric complications ($p=0.028$) and stillbirth ($p=0.037$) whereas there was a tendency to be associated with the presence of a mutation in FV-Leiden or FII-G20210A ($p=0.089$).
- Analysis showed that the rate of APLAs was higher in women with RPL ($p=0.046$) compared to other cases with less than 3 abortions or these of late pregnancy. In the same group the number of miscarriages was associated with a positive family history ($p=0.011$) and in case of a stillbirth there was association with the presence of heterozygosity in FV-Leiden or FII-G20210A.

Conclusion

- *It is challenging for physicians to detect, which women may benefit from thrombophilia screening !!!*
- The FV-Leiden and FII-G20210A mutations have a low frequency in the population, and women with these mutations can have normal pregnancies and it is not definite that anticoagulation decreases future miscarriages.
- In our study the occurrence of APLAs was significantly higher in women with RPL compared to others and tests for the other two mutations revealed only one woman (0.36%) with double heterozygosity and positive family history that should have underwent prophylaxis with anticoagulation antepartum and postpartum according to the current guidelines.
- Screening for those mutations could be important only in women with positive family history and pregnancy complications, especially stillbirth.