

To what extent is repeat testing necessary for diagnosis of A.P.A. syndrome?

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Summary: Eighty two subjects who tested positive for antiphospholipid antibodies (APA) were prospectively subjected for retesting. All of these had a history of recurrent spontaneous missed abortions in late I trimester or II trimester. Of these 82, 10.97% tested negative on repeat testing. It was also found that amongst the weak positives on initial testing there was maximum (46.7%) incidence of testing negative on repeating the test. None of the strong positive subjects, tested negative on repeat testing. Thus a repeat testing is necessary for those who test weak positive and probably not for all.

Introduction

Strong association of antiphospholipid antibodies (APA) with many clinical situations is now well established. These include recurrent spontaneous missed abortions (Harris 1987) IUGR, pre-eclampsia remote from term (Lockshin et al 1985, Christensen et al 1993) and the like. Antiphospholipid antibodies can pose many difficulties for the clinician ranging from practical issues of detection and patient management to conceptual issues regarding the mechanism of fetal loss. One such difficulty arises from the recommendation that single result of APA testing yielding a positive result may be a transient phenomenon (Lockwood 1987). Therefore repeat testing after 8 weeks was recommended.

In this prospective study we have tried to examine the extent to which such a repeat testing is required. In case of such a necessity, specific groups where such a repeat testing is necessary, has also been studied.

Material and methods

This prospective study has been carried out in the III unit of the Dept. of Obstet. & Gynaecol., Medical College and S.S.G. Hospital, Baroda. For this study only those cases with a history of recurrent spontaneous missed abortions of late I trimester or II trimester were included.

By recurrent abortions it was meant three or more abortions.

APA were tested by the standard ELISA technique. The results were expressed as per the standard protocol of low positive, moderately positive and high positive as shown in Table I.

Table I

APA +ve Titers	GPL Units
Negative (insignificant)	< 5
Weak positive	5-20
Moderately positive	20-100
Strongly positive	> 100

All subjects exclusively enrolled for this study were subjected to repeat testing of APA if the initial reporting was positive. The results so obtained were studied, analyzed and conclusions drawn on the basis of current literature.

Results

In all 82 subjects were prospectively subjected to repeat testing as a part of this study. All of these 82 had tested positive on first testing for APA.

Of these 82, 9 tested negative again after 8 weeks on second testing. This brought the % change from positive to negative to 10.97%. As shown in Table II, 73 i.e. 89.03% tested positive again.

Table II
Change on II Testing

Tested +ve on I testing	Tested +ve on II testing	-ve on II testing	%change
82	73	09	10.97%

Amongst the 15 subjects who tested weakly positive on initial testing, 7 tested negative (46.8%) and 8 (53.3%) tested positive again on repeat testing. There was about 50% chance of subjects with low positive titer testing negative on the second testing (7 out of 15).

However in the moderate positive group, only 2 of the 48 tested negative on repeat testing. In fact 4 from this group climbed one rung higher and now tested strong positive as shown in the Table III.

Table III
Titer Groupwise Change on II Testing

On I-Testing	On II - Testing					%Change
	+ve	Neg. n	Weak %	Mod +ve	Strong +ve	
(W) 15	07	46.7	07	01	00	53.3
(M) 48	02	4.2	01	41	04	14.6
(S) 19	00	0.0	00	01	18	5.3
82	09% Negative on II - 10.97 %					

W=Weak M=Moderate S=Strong

In the strong positive group, none of the 18 showed a negative titer on repeat testing.

Discussion

All women who test positive for APA at St. Mary's Hospital - Recurrent Miscarriage Clinic were subjected to repeat testing (Rai & Reagan 1996). They report that around 65% will test positive on repeat testing. There-

fore they consider it as a standard protocol to retest all women who are found positive for APA. Such a recommendation also came in one of the earlier studies of Lockwood et al (1989). In this study we have tried to identify cases where such a repeat testing is necessary. In contrast to the results of Rai & Reagan (1996) we did not have such a high figure of about 35% testing negative on repeat testing. We had this figure at around 10%.

But we found that amongst those women who test weakly positive there is a 46.7% chance of testing negative on repeat testing. On the other hand we feel there is no need to subject strongly positive cases to repeat APA testing. We did not have any subject amongst the strong positive group testing negative.

The issue of subjecting to repeat third testing subjects who were moderately positive and now test weakly positive is still unsettled. As the number was only one in this series we can't draw any conclusion from this. However as per the protocol followed by our unit, we do not subject these cases to repeat third testing.

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References

1. Christensen K, Herking AM, Junker P. Ugeskr L 15:289; 1993.
2. Lockwood CJ, Romero R, Feinberg RF. Am J Obst Gyn 156:114; 1987.
3. Harris EN. Br J Rheumatol 26:324; 1987.
4. Lockshin MD, Druwin ML, Goel S. N Engl J Med 3:152; 1985.
5. Rai R, Reagan L. Progress in Obstet. & Gynecol. 12:135; 1996.