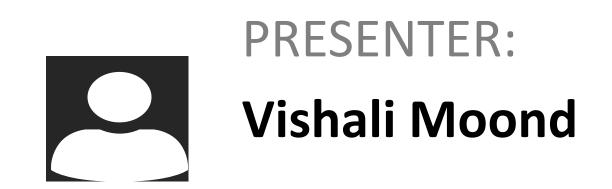
Title: The Role of Primary Prophylaxis in Asymptomatic Patients with Antiphospholipid Antibody (aPL+): a Meta-Analysis



BACKGROUND: To determine whether primary prophylaxis has a significant protective effect on risk of thrombosis among patients with antiphospholipid antibodies (aPL+).

METHODS:

- We analysed the effects of the treatments in the studies using the following combinations: aspirin only versus placebo or aspirin with anticoagulant versus placebo or other treatment.
- Total of 12 primary studies (9 prospective and 4 retrospective cohort studies and 4 randomized controlled trials) were included.
- The two outcomes namely, thrombosis and fetal loss in patients without any prior history of these in aPL+ patients were studied.



The risk of first thrombotic event and fetal loss does not decrease by the use of low dose aspirin or anticoagulants among asymptomatic individuals with antiphospholipid antibody

ASA + Antice Author, year Eve	10000		Co Events	ntrol Total	Risk Ratio	RR	95%-CI	Weight
Erkan et al, 2001 Forasteiero et al, 2005 Erkan et al, 2007 Erkan et al, 2007 Tarr et al, 2007 Hereng et al, 2008 Tektonidou et al, 2009 Ruffati et al, 2009 Pengo et al, 2011 Ruffati et al, 2011 Martinez–Zanora et al, 2012 Cervera et al, 2014	2 4 5 4 1 1 8 4 7 4 2 90 90	31 31 48 61 52 50 72 188 37 123 21 770	19 8 1 0 2 2 18 10 18 6 9 11	34 77 50 13 29 71 57 182 67 115 66 230		1.24 - 5.21 - 1.98 - 0.28 - 0.71 - 0.35 - 0.39 - 0.70 - 0.62 - 0.70	[0.03; 0.46] [0.40; 3.83] [0.63; 42.97] [0.11; 34.56] [0.03; 2.94] [0.07; 7.62] [0.17; 0.75] [0.12; 1.21] [0.32; 1.53] [0.18; 2.15] [0.16; 2.98] [1.33; 4.49]	4.6% 4.5% 12.1% 9.7% 12.0% 9.2% 8.0%
Random effects model Prediction interval Heterogeneity: $I^2 = 65\%$, $\tau^2 = 0$.6421	1484 , <i>p</i> < 0	.01	991	0.1 0.5 1 2 10	0.71	[0.38; 1.33] [0.11; 4.73]	100.0%

ASA + A Author year	100		Co Events	ontrol Total		Risl	k Ratio		RR	95	‰–CI	Weight
Rai et al, 1997	13	45	36	45					0.36	[0.22;	0.58]	36.5%
Ismail et al,2016	14	90	30	90		-			0.47	[0.27;	0.82]	33.9%
Farquharson et al,2021	13	51	11	47					1.09	[0.54;	2.19]	29.6%
Random effects model Prediction interval		186		182		<	<u></u>		0.55	[0.13; [0.00; 84		100.0%
Heterogeneity: $I^2 = 70\%$, τ^2	² = 0.2280	n = 0	0.04							[0.00, 0	+5.05]	
rictorogeneity. r = 7070, t	- 0.2200	<i>D</i> , P = 0	7.04	(0.001	0.1	1 10	1000				

RESULTS:

We found an overall RR of 0.71 for the risk of first thrombosis (95% CI: 0.38 to 1.33) and RR of 0.55 for the risk of fetal loss (95% CI: 0.13 to 2.22) in asymptomatic aPL+ patients treated with aspirin and anticoagulants vs the control group.

DISCUSSION:

- EULAR guidelines recommend use of lowdose aspirin as primary thromboprophylaxis.
- Need to determine optimal prognostic markers and associated risk factors to use therapeutic intervention for prevention of the important complications of APS.
- Need for more RCTs

