

Mapping the first-choice hormonal therapy for infantile epileptic spasms syndrome in South Asia: A network meta-analysis

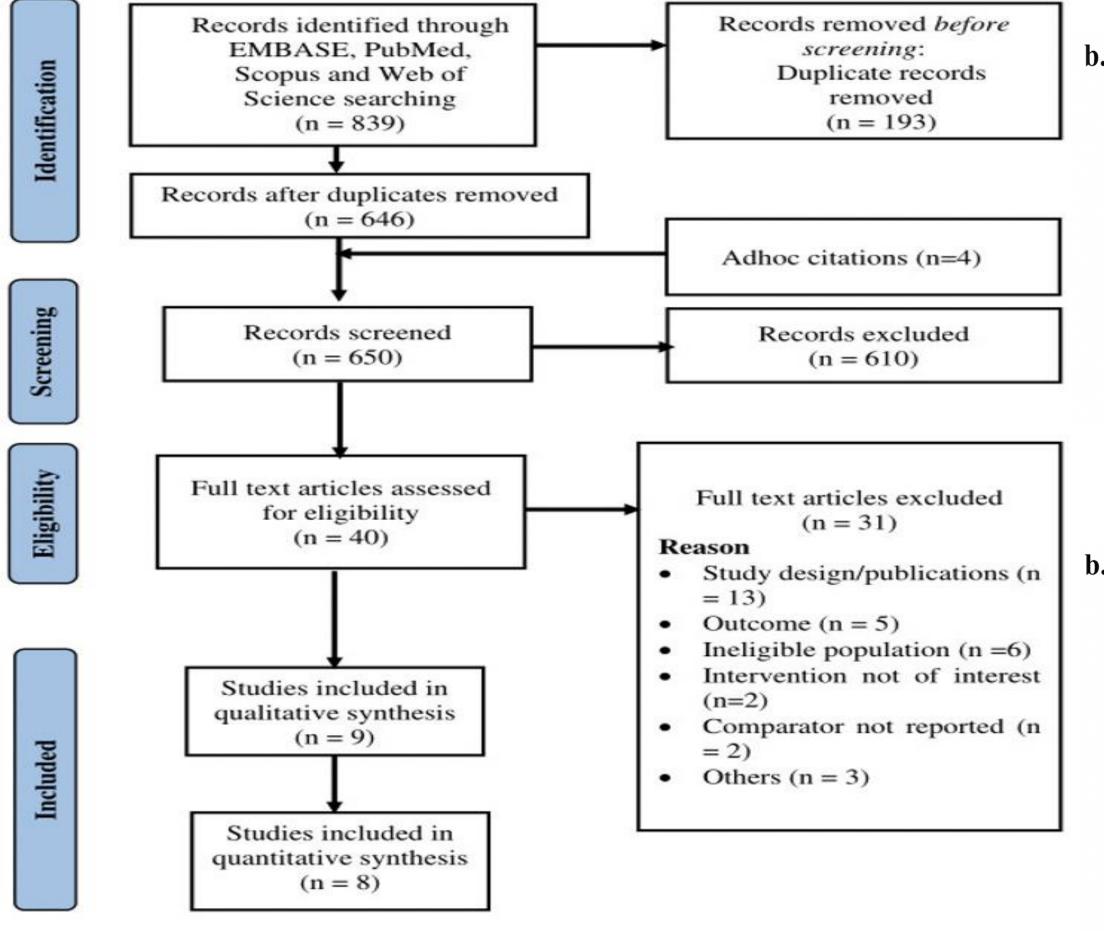
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BACKGROUND

- Infantile epileptic spasms syndrome (IESS), the most common cause of epilepsy of infantile onset, is characterized by epileptic spasms (ES) and hypsarrhythmia on EEG.
- There is a conflict of literature with regards to first choice hormonal therapy in South East Asia.

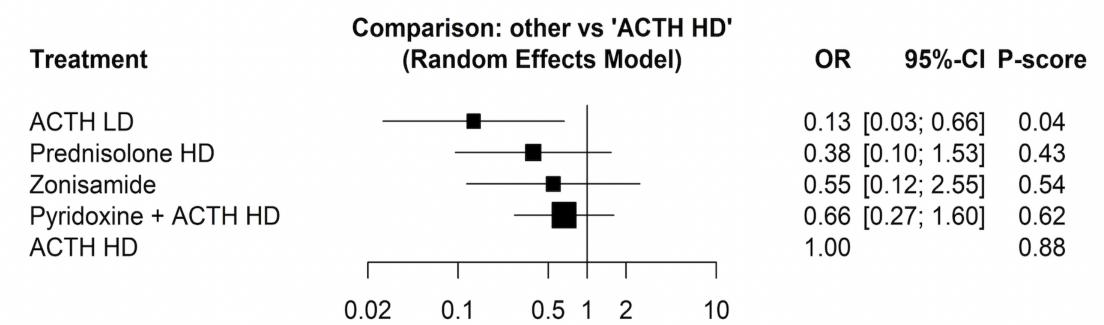
MATERIALS & METHODS



RESULTS

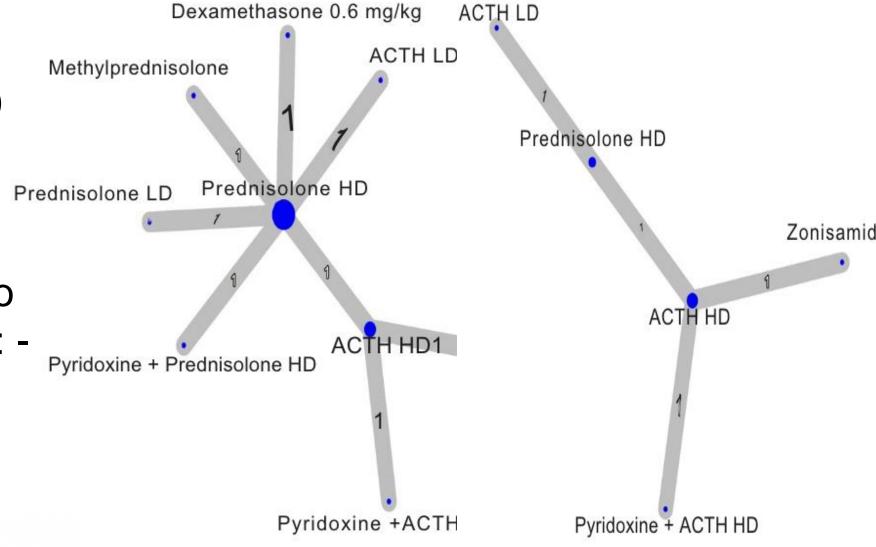
- ACTH HD (OR: 7.60; 95%CI: 1.51, 38.17; p-score: 0.88) and prednisolone HD (OR: 2.90; 95%CI: 1.27, 6.63; p-score: 0.43) has greater efficacy at six weeks as compared with ACTH LD (low dose).
- Methylprednisolone has taken negative MD time taken to be spasms free as compared with prednisolone LD (MD: -3.00; 95%CI: -5.10, -0.90), prednisolone HD (MD: -4.10; 95%CI: -5.10, -3.10) and dexamethasone 0.6mg/kg/day (MD: -5.04; 95%CI: -6.74, -3.34).

b. Complete cessation of spasms after six-weeks treatment



b. Time taken for cessation of spasms

Treatment				s 'ACTH s Model)		MD	95%-CI	P-scor
Dexamethasone 0.6 mg/kg Pyridoxine + ACTH HD Prednisolone HD Prednisolone LD ACTH HD Methylprednisolone			-	- - - - -		1.60 [0 1.10 [-4 0.00 [-6 0.00	3.88; 7.96] 0.28; 2.92] 4.65; 6.85] 5.05; 6.05] 3.84; 2.84]	0.17 0.27 0.39 0.61 0.61 0.95
	-10	-5	0	5	10			



CONCLUSIONS

Our network meta-analysis presents the highest quality evidence for the preferred first-choice hormonal therapy in managing Infantile Epileptic Spasms Syndrome (IESS) in South Asia, identifying ACTH HD at six weeks as the top-ranking treatment for the cessation of spasms. Additionally, Methylprednisolone is shown to achieve the quickest cessation of spasms with the least amount of time taken.

