

# Effects of prophylactic anticholinergic medications to decrease extrapyramidal side effects in patients taking acute antiemetic drugs: a systematic review and meta-analysis

D'Souza RS, Mercogliano C, Ojukwu E, et al Effects of prophylactic anticholinergic medications to decrease extrapyramidal side effects in patients taking acute antiemetic drugs: a systematic review and meta-analysis Emerg Med J 2018;35:325-331.

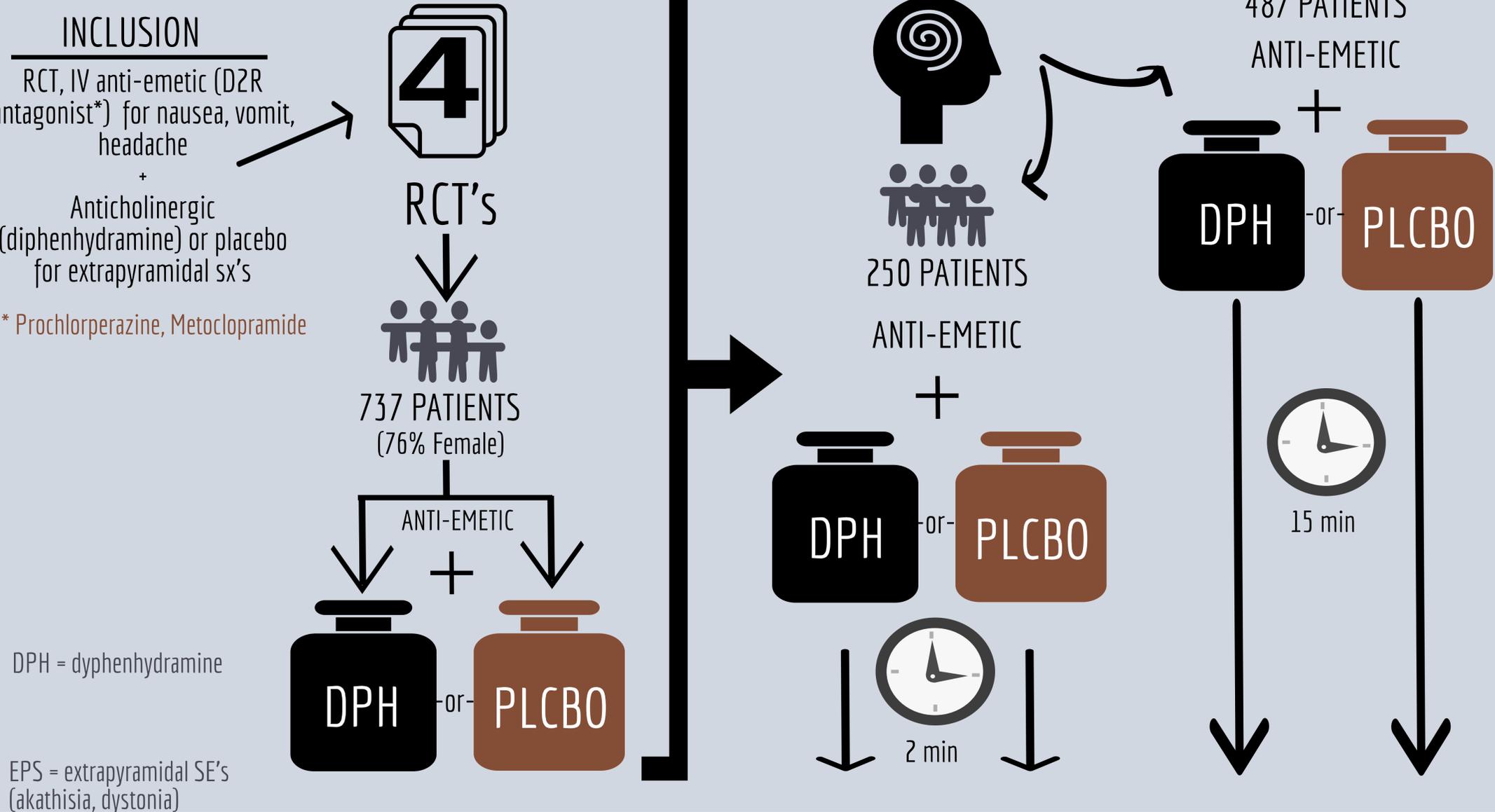
## CLINICAL QUESTION

What is the benefit of prophylactic anticholinergics in reducing extrapyramidal symptoms (EPS) from dopamine-R antagonists (anti-emetics)?

## STUDY

Meta-analysis of RCT's published through 2017 of patients receiving dopamine-receptor antagonist (anti-emetic) therapy for acute migraine with anticholinergic prophylaxis

## META-ANALYSIS



EPS	11%	15%	→	14%	27%	10%	10%
OR (95% CI)	0.7 (0.4, 1.2)			0.4 (0.2, 0.8)		1.1 (0.6, 1.9)	

**CONCLUSION** Diphenhydramine reduces EPS when anti-emetic given rapidly (2-min bolus) but no benefit over placebo when given slowly (15 min infusion); the least EPS occurred when anti-emetic given as 15 min infusion