

## *Journal Watch* (Medications)

### **Low-dose levomepromazine in refractory emesis in advanced cancer patients: an open-label study.**

Eisenclas JH, Garrigue N, Junin M, et al. Palliative Medicine 2005; 19:71-75.

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Received during: Journal Club (5<sup>th</sup> May 2007)  
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#### Abstract:

Seventy patients with advanced cancer and refractory emesis were treated with subcutaneous boluses of levomepromazine (median daily dose: 6.25 mg; range: 3.12-25) in an open-label prospective study. Treatment was associated with a decrease in nausea from a median of 8/10 at baseline (IQR 7-8) to a median of 1 (IQR 0-2) after two days of treatment ( $P < 0.0001$ ); vomiting ceased in 92% of cases. It was possible to remove the nasogastric tube from all 11 patients who had one. The most frequently reported side effect was sedation, with a median of 2/10 (25-75% percentile 1-3), which was not correlated with the dose of levomepromazine. This study suggests that treatment with low-dose levomepromazine is an effective and safe option for advanced cancer patients who fail to respond to first-line antiemetic treatment.

#### Comments:

##### Strengths/uniqueness:

- Levomepromazine is a drug that has established use in management of delirium in palliative care setting.
- Authors conducted systematic prospective evaluation of effectiveness and side effects of Levomepromazine as a second line anti-emetic in palliative patients.
- Levomepromazine is available in sub-cutaneous route; also its low cost both important in palliative care setting.
- Numerical scale was used to assess symptoms, also number of episodes of emesis were recorded, 6-point improvement in rating was used as a cut-off to strengthen results.
- Authors identified many of the limitations

##### Weakness:

- Not a controlled randomized trial,
- Use of placebo would not be ethically acceptable, but one could compare efficacy vs. atypical drugs like Olanzapine.
- An open-label study, possibly placebo effect present
- Short duration of observation and fluctuating course of bowel may have influenced the results.
- No standardized dose /wide range of doses used
- Limited to severe cases of nausea and emesis

##### Relevance to Palliative Care:

- Levomepromazine is a broad-spectrum anti-emetic, which appears to be effective as a second line drug for refractory cases of severe nausea,
- Already used for delirium/agitation, potentially can be used for both and decrease poly-pharmacy.
- Sub-cutaneous route available, which is important in palliative care setting
- Low cost compared to 5HT3 drugs