

Outcomes in Patients With Refractory Gastroparesis on Domperidone - A 12-Year Experience

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Introduction

Domperidone (D2 and D3 receptor antagonist) is a prokinetic with less side effects than metoclopramide, the only FDA-approved medication for gastroparesis, and is only available via the FDA IND program.

Aim: To examine clinical response and side effects profiles of patients enrolled in our program to identify those most likely to benefit.

Methods

Records of patients enrolled from 2010 through 2021 were examined.

Pts who completed an initial PAGI-sym questionnaire were contacted for a repeat PAGI-sym and self-reported quality of life.

Records of disenrolled pts were reviewed for cause for disenrollment, adverse effects if any, and impact of Domperidone on symptoms while on drug.

Data is reported at percentages and mean \pm SD. Variables were compared using Chi-squared test (categorical) and t-test. $P < 0.05$ was considered significant.

Results

- 301 pts (85.7% F), were consented.
- 41 pts of 112 still enrolled (E) had both initial and follow-up PAGI-sym. Of these, 32 (78%) were female.
- Age on entry was 50 ± 17.7 yrs, with 70.1% older than 40 yrs. Mean treatment duration was 39 ± 39.3 mo.
- Top GP causes were idiopathic (43.9%), diabetes (24.4%) and post-surgical (12.2%).
- 189 patients were disenrolled.

Results

- There was significant improvement in the severity of all symptoms on PAGI-sym scale after Domperidone treatment (Table 1).

Symptoms	PAGISYM-1 (mean +/- SD)	PAGISYM-2 (mean +/-SD)	p value
Regurgitation	2.23 +/- 1.55	1.27 +/- 1.1	<0.001
Nausea	3 +/- 1.7	1.66 +/- 1.15	< 0.001
Upper Abdominal Pain	2.66 +/- 1.59	1.37 +/- 1.18	< 0.001
Stomach Fullness	3.45 +/- 1.48	2.41 +/- 1.32	0.003
Loss of Appetite	2.9 +/- 1.74	1.46 +/- 1.4	< 0.001
Upper Abdominal discomfort	2.7 +/- 1.54	1.46 +/- 1.29	< 0.001
Bloating	3.48 +/- 1.55	2.2 +/- 1.5	< 0.001
Retching	1.4 +/- 1.53	0.61 +/- 0.92	< 0.001
Stomach or Belly Visibly Larger	2.69 +/- 1.89	1.55 +/- 1.45	0.001
Vomiting	1.89 +/- 1.84	0.78 +/- 1.17	0.001
Not Able to Finish a Normal Sized Meal	3.5 +/- 1.52	2.05 +/- 1.45	< 0.001
Feeling Excessively Full After Meals	3.75 +/- 1.28	1.93 +/- 1.44	< 0.001

Table 1. Differences in symptom severity before and after initiation of Domperidone treatment.

- 189 pts were disenrolled (DE), of which 31 never started drug, and 67 charts were reviewed in detail (Figure1).

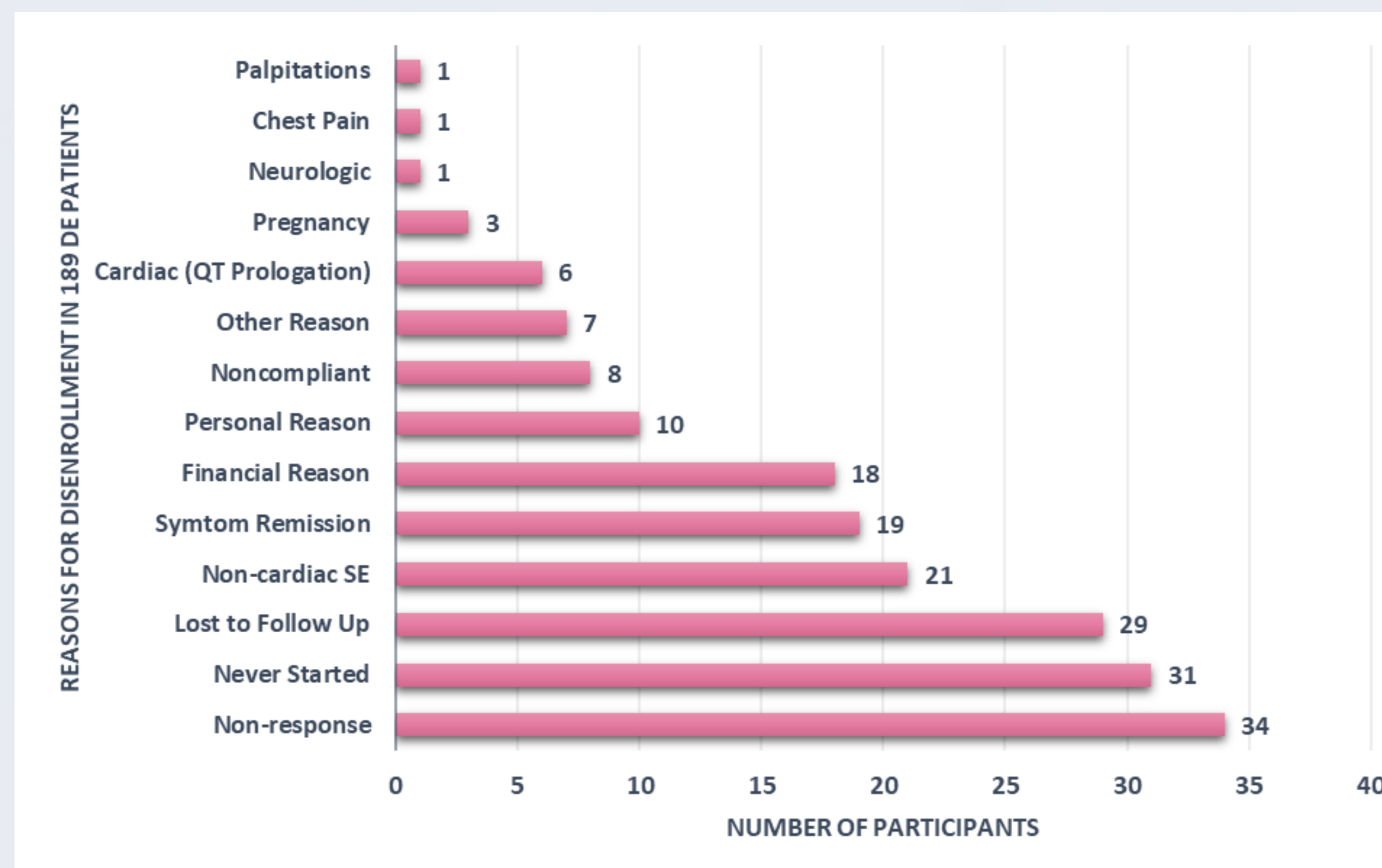


Figure 1. Reasons and Number of Patients who Disenrolled

Results

- There was no significant difference in causes or initial symptom severity between genders.
- Gender and age groups did not affect this improvement.
- Overall self-reported quality of life (QoL) improved regardless of gender, age group and use of psychotropic medication.

Discussion

- Domperidone improves symptoms related to GP regardless of etiology. Nearly two thirds disenrolled over time, but very few have prolonged QTc.
- Detailed review in a subset of pts suggest no specific etiologies result in better symptom response to Domperidone or predict likelihood of adverse events.
- Symptom remission can take several years to be sufficient to discontinue treatment.

Conclusion

- Gastroparesis is a GI disorder with multiple debilitating symptoms that can affect patient's quality of life.
- Domperidone showed satisfactory efficacy in reducing symptoms in patient with refractory gastroparesis.

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