

INITIATION OF THERAPY
SHOULD BE DELAYED UNTIL
PARKINSON'S DISEASE
SYMPTOMS BECOME DISABLING
OR BOTHERSOME

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*AVOID MEDICAL THERAPY
UNTIL PATIENTS HAVE
SUBJECTIVE OR OBJECTIVE
DEFICITS IN FUNCTIONING OR
QUALITY OF LIFE.*



DELAYED DOPAMINERGIC THERAPY

- Traditional view
- Do no harm: potential benefits versus drawbacks
- Symptomatic treatments
- New hypotheses



INITIAL DOPAMINERGIC THERAPY

- Short-term benefits
- Long-term benefits
- Potential complications
- Cost/benefit



DOPAMINERGIC THERAPY

- Levodopa
- Agonist
- MAO-B Inhibitor
- Amantadine



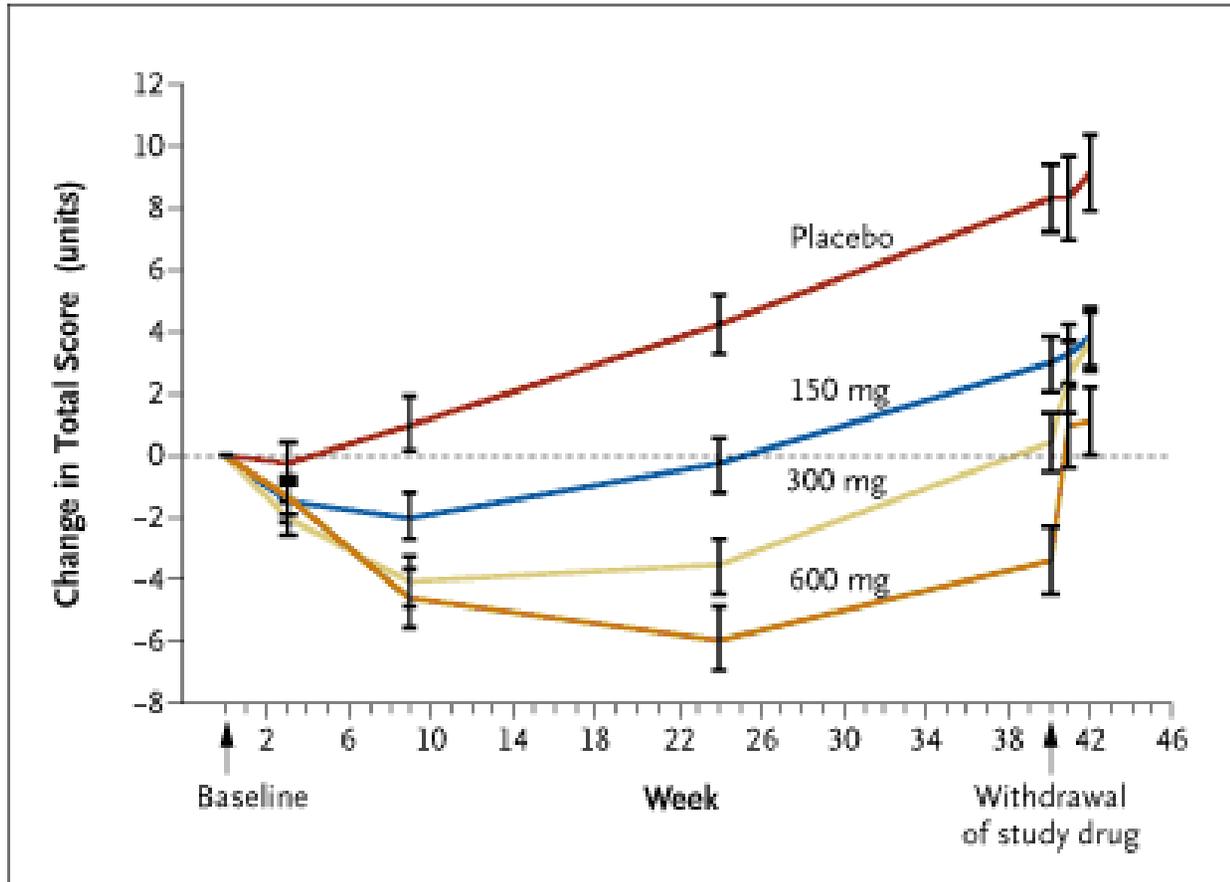
LEVODOPA THERAPY

- Improves motor function and quality of life
- Long-term benefits: unclear. Does not hasten disease progression or lose effectiveness with time
- Adverse effects:
 - Nausea, dizziness, somnolence
 - Dyskinesias, motor fluctuations
- Cost/benefit: acceptable if treatment is needed



ELLDOPA STUDY

Parkinson Study Group. NEJM 2004;351:2498-2508



AGONIST THERAPY

PRAMIPEXOLE AND ROPINIROLE

- Improves motor function and quality of life, but less effective symptomatically than levodopa
- Long-term benefits: unclear.
- Adverse effects:
 - Nausea, dizziness, somnolence, sleep attacks, edema, compulsive behavior
 - Supposedly less dyskinesias, motor fluctuations
- Cost/benefit: higher cost/lower benefit



[Review]

Dopamine agonist therapy in early Parkinson's disease

RL Stowe, NJ Ives, C Clarke, J van Hilten, J Ferreira, RJ Hawker, L Shah,
K Wheatley, R Gray

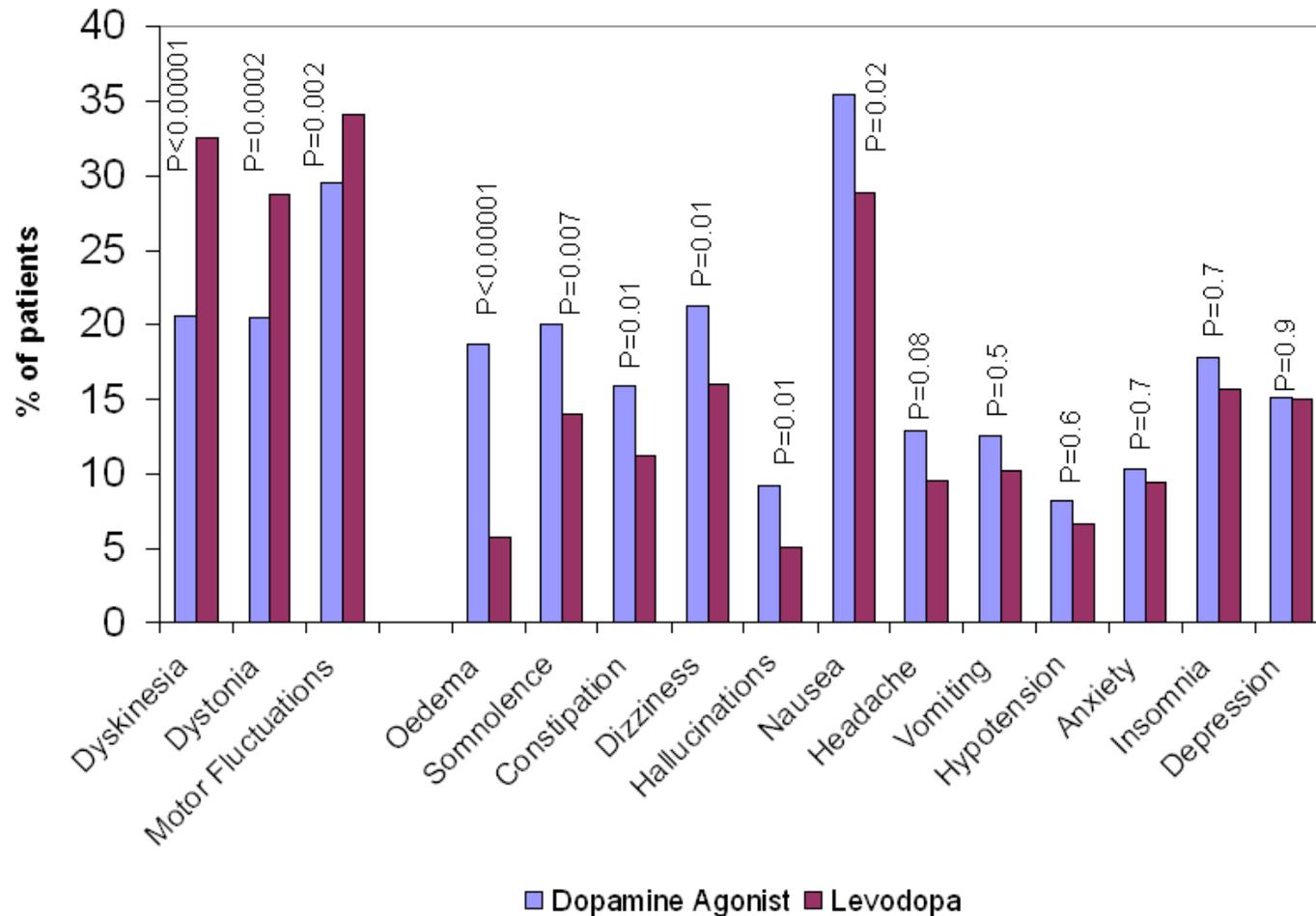
Cochrane Database of Systematic Reviews 2008 Issue 3 (Status: *Unchanged*)

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[DOI: 10.1002/14651858.CD006564.pub2](https://doi.org/10.1002/14651858.CD006564.pub2) This version first published online: 23
April 2008 in Issue 2, 2008



Additional Figure 2: Incidence of adverse effects in Parkinson's disease for trials of DA (+/- LD) vs. LD



Fourteen-year Final Report of the Randomized PDRG-UK Trial Comparing Three Initial Treatments in PD

Katzenschlager R, Head J, Schrag A, Ben-Shlomo Y, Evans A, Lees AJ,
on behalf of the Parkinson's Disease Research Group of the United Kingdom

Neurology 2008;71:474-480

Initial treatment with the dopamine agonist bromocriptine did not reduce mortality or motor disability and the initially reduced frequency in motor complications was not sustained. We found no evidence of a long-term benefit or clinically relevant disease-modifying effect with initial dopamine agonist treatment.



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MAO-B INHIBITOR THERAPY

RASAGILINE

- Minimal improvement in UPDRS score
- Long-term benefits: unclear – TEMPO & ADAGIO studies
- Adverse effects:
 - Nausea, vomiting, weight loss, anorexia, postural hypotension, somnolence, food restrictions, drug interactions
- Cost/benefit: high cost/low benefit



A Randomized Placebo-Controlled Trial of Rasagiline in Levodopa-Treated Patients With Parkinson Disease and Motor Fluctuations

The PRESTO Study

Parkinson Study Group

Table 3. Patients With Adverse Events During Treatment

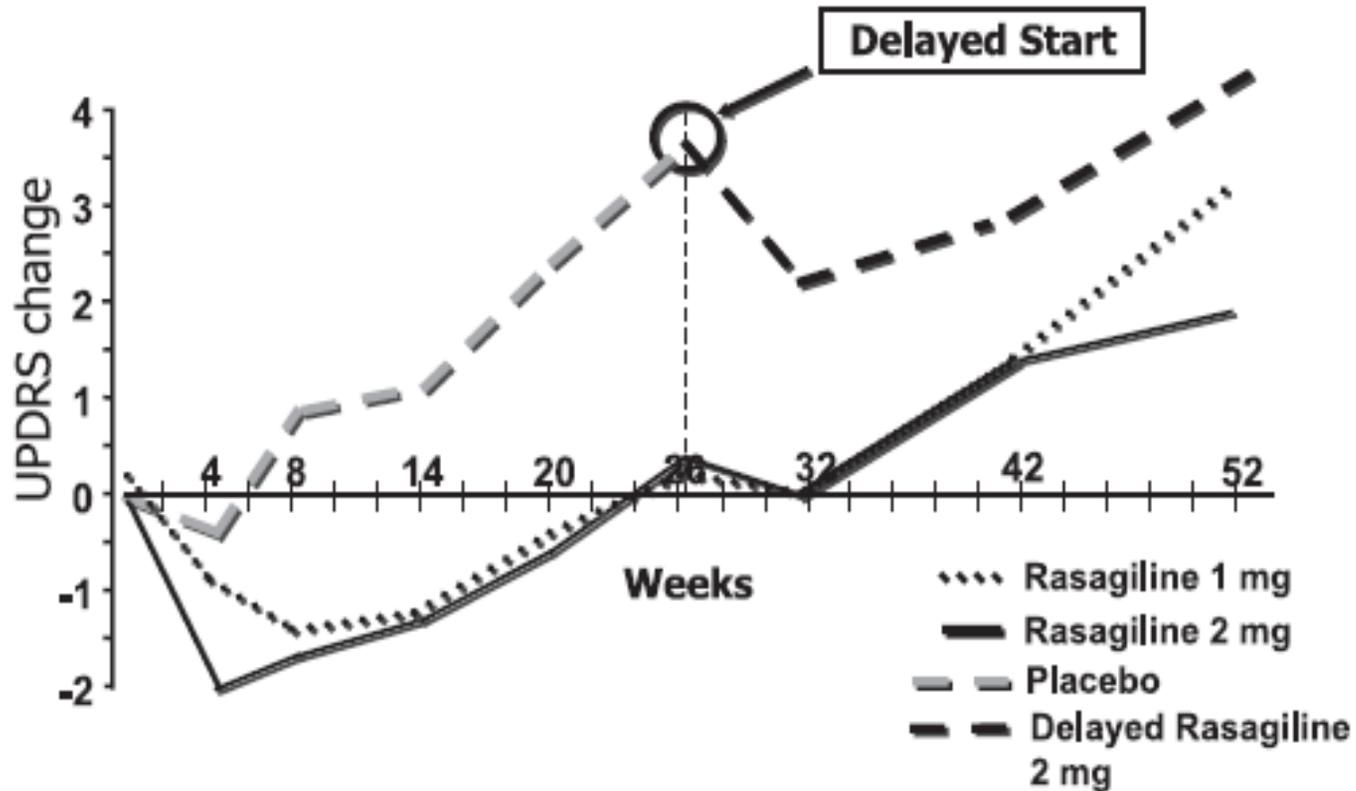
Event	Placebo, No. (%) (n = 159)	Rasagiline			
		0.5 mg/d (n = 164)		1.0 mg/d (n = 149)	
		No. (%)	<i>P</i> Value*	No. (%)	<i>P</i> Value*
Weight loss	4 (2.5)	4 (2.4)	.76	14 (9.4)	.02
Vomiting	2 (1.3)	6 (3.7)	.31	10 (6.7)	.03
Anorexia	1 (0.6)	3 (1.8)	.64	8 (5.4)	.04
Balance difficulty	1 (0.6)	9 (5.5)	.03	5 (3.4)	.19

*Compared with placebo.



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RASAGILINE TEMPO STUDY



Hauser RA, Zesiewicz TA adopted from Parkinson Study Group, Arch Neurol 2004;61:561-566



**EARLY DOPAMINERGIC THERAPY
SHOULD BE DELAYED UNLESS AGENTS
CAN BE SHOWN TO HAVE
A DEFINITE:**

- Neuroprotective effect
- Beneficial effect on the “intrinsic physiological compensatory mechanism” to prevent disease progression



NONPHARMACOLOGICAL THERAPY

- Keep active
- Exercise regularly
- Education
- Nutrition
- Socialization/Support





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