Palliative Care for Parkinson's Disease

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Objectives

- To describe the end-of-life needs of Parkinson's disease patients and their caregivers
- Describe translations of these findings into quality clinical care for people with Parkinson's Disease
- Understand implications for multidisciplinary involvement in PD palliative care (Nutrition, PT, OT, ENT, Speech Therapy, Psychiatry, Psychology)



Definition of Palliative Care

- Support of people with life-limiting illness as they live, until they die.
 - Physical symptom control
 - Avoid iatrogenic effects of treatment
 - Prevent pressure sores, falls
 - Quality of life
 - Dignity
 - Relieve fear, anxiety, depression
 - Caregiver support

The clinical characteristics of PD create challenges to good palliative care

- Parkinson's Disease (PD) is a progressive neurodegenerative disorder
 - Loss of cells from substantia nigra, Lewy body inclusions
 - After ~ 5-10 years dyskinesias, neuropsychiatric problems, increasingly poor response to drug treatments, ongoing or worsening depression.
 - Slower progression for early onset, more rapid for older adults.
 - Average length of life with PD 14.6 (± 9.8) years since advent of levodopa*

^{*}MacMahon, 1999

Recognizing When to Transition to a Palliative Approach

- Increasing motor disability with poor response to medication/surgical intervention
- Persistent hallucinations in the absence of drugs that could cause hallucinations
- Dementia, where risk of cognitive compromise outweighs motor benefits of dopaminergics

Negotiating the Transition

- Understand individual preferences for information
- Frequent discussions with patients and family/caregivers
 - Who should initiate these discussions?
 - Multidisciplinary approach could be helpful
- Communicate known limitations of treatment (e.g. drugs will not prevent falls, DBS may not be appropriate intervention in context of significant neuropsychiatric symptoms/ dementia)

Do people die from PD?

- Often not cited on death certificates, neurology textbooks equivocal
- PD was the 14th leading cause of death in the U.S. in 2006 per CDC
- Common cited causes for PD patients include:
 - Fractures, complications from falls
 - Chest and urinary infections
 - Immobility
 - Exhaustion/weight loss
- Goy, Carter, & Ganzini reported (Neurology 2007) on 47 caregivers who described PD as primary cause of death.

Hospice Referral

- MD verifies six months or less remaining lifespan
- No further curative treatment
- Palliative approaches to symptom management, comfort care

Appropriate Hospice Referral

- Significant dysphagia occurs an average 15-24 months before death¹
- Serious neuropsychiatric problems²
 - Hallucinations
 - Confusion
 - Dementia
- PD medications significantly reduced³ due to altered risk/benefit profile
- Weight loss³ secondary to reduced intake and dyskinesia

¹Miller et al., Arch Neurol 2001;58:259-264; ²Clough & Blockley in Palliative Care Neurology, Voltz et al., eds., 2004; ³Goy, in preparation

End-of-life needs of Parkinson's disease patients and caregivers

Lissa Brod, MD



Motor Complications of Late Stage PD (Hoehn-Yahr Stage 5)

- Freezing
- Rigidity
- Dyskinesia
- Dysarthria
- Dysphagia
- Respiratory problems
- Less response to dopaminergic medicines
- Pain



Nonmotor Complications of Late Stage PD (Hoehn-Yahr Stage 5)

- Cognitive slowing
- Dementia 40% develop in late stages
- Psychosis/hallucinations
- Depression, anxiety
- Dysregulation of blood pressure
- Dysregulation of bowel/bladder constipation
- Sleep disturbance

Patient suffering in PD

- Severity of suffering 4 (out of 5) in both Parkinson's disease and related disorders (PDRD) and ALS in the last month of life
 - Difficulty communicating, physical discomfort, insomnia, choking, depression, anxiety, pain
 - Difficulty eating, dyspnea worse in ALS
 - Confusion worse in PDRD

Patient suffering in PD

- Most common concerns in last month, per caregivers: being away from home (9), loss of mobility (7), trouble communicating (7), saying goodbye (7), dying process (confronting death, stopping treatment) (6), loss of independence/control (5).
- Most common concerns in last days/hours, per caregivers: inability to communicate (14), loss of mobility (9), saying goodbye (8), being away from home (6), loss of independence/control (6), confusion (6).

Table 1. Caregiver Ratings of PDRD (N = 52) Patient Symptoms in the Final Month of Life

	Frequency*	N (%) Rated	N (%) Rated Symptom
Symptoms	(Median, IQR)	Symptom Moderate	"Quite a Bit," or "Very
		or Severe	Much" Bothersome
Difficulty Eating	3 (2,4)	34 (65)	23 (44)
Difficulty			
Communicating	3 (2,4)	37 (71)	32 (62)
Physical Discomfort	3 (2,3)	33 (63)	19 (37)
Insomnia	2 (1,3)	22 (42)	16 (31)
Shortness of Breath	2 (1,3)	24 (46)	15 (29)
Choking	2 (1,3)	22 (42)	18 (35)
Confusion	3 (2,4)	32 (62)	22 (42)
Depressed Mood	3 (1,3)	28 (54)	17 (33)
Anxiety	2 (1,3)	28 (54)	18 (35)

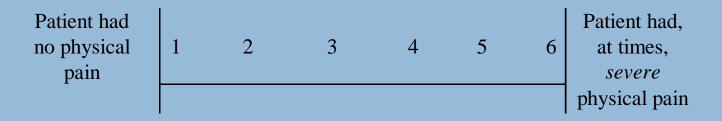
^{*} 1 = never, 2 = a few times, 3 = frequently, 4 = almost all the time, 5 = constantly.



Pain in PD

- Musculoskeletal causes
 - Immobility
 - Muscle spasms
- Motor complications
 - Limb rigidity
 - Dystonia
- Nonmotor complications
- Altered nociception from the basal ganglia





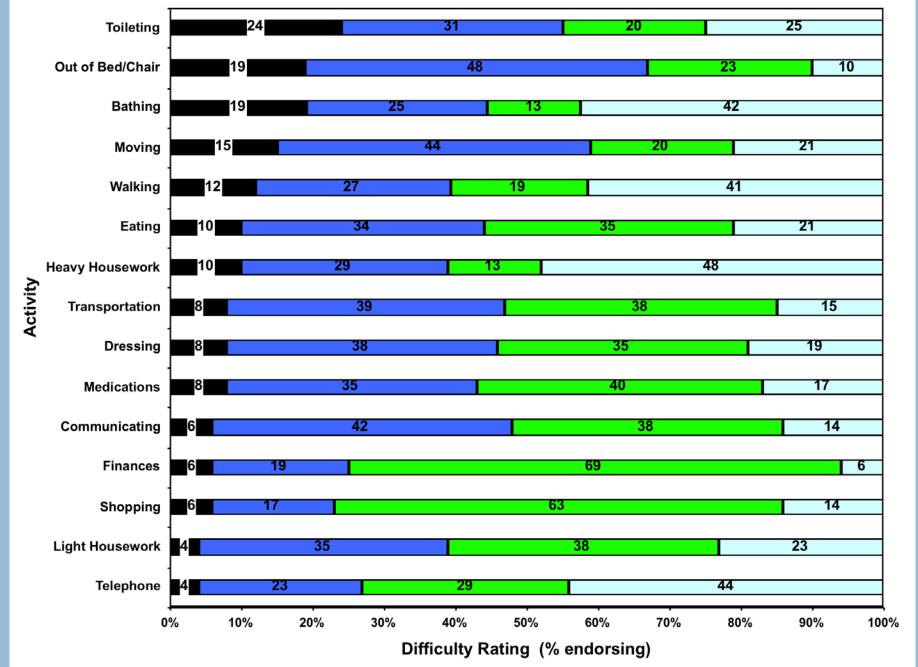
- Median Severity = 4
- 42% (n = 20) rated pain as severe (4-6)
- Of those, 30% (n = 6) received NO pain medication in the last month of life



Caregiver Assistance to Loved One

- Assisted with a mean of 13 possible activities of living in the last months of life, a mean of 6 hours per day.
- Tasks requiring physical effort were rated the most difficult.
- One third or more of respondents did not feel prepared to cope with the stress of caregiving, with the patient's physical needs, or with emergencies.
- High incidence of depression in PD caregivers (46%). No significant difference from ALS caregivers.





legend

- **Very hard**
- Somewhat-Pretty hard
- Easy-Not too hard
- Not done



Long Term Care

- 40% of PDRD patients died while in a skilled nursing or other long term care facility; only one in four died at home.
- 17% of PDRD residents of long term care facilities died without any significant family or friends in attendance, while all who remained at home had at least one significant person with them (p = .006).



Goals of Care

- 15% of PDRD caregivers were unable to state loved one's goals of care.
- 48% of the patients were described as unable to make any decisions in the last month of life.
- Caregivers rated less satisfaction with answers received from health care professionals as patient confusion increased in frequency, patients had greater impairment of decision-making ability during the last month of life, and as a trend, when communication problems were increasingly severe.



Goals of Care

- 87% had a health care proxy and 92% had a living will.
- 79% wanted comfort care, 6% life-prolonging.
 - CPR was not performed on any patient,
 - 26% were fed by tube and
 - 30% received some type of breathing support.
- Most (74%) felt wishes regarding medical treatments were followed.

Goals of Care

- When should providers discuss this?
 - Supporting hope vs realistic planning
 - Prognostic uncertainty



Services, Treatments during Final Month

- Fifty-six percent of PDRD caregivers reported that their loved one received hospice care, for a median of three weeks
 - More likely to receive pain medication in hospice.



Hospice

- Satisfaction with hospice care was at the top of the ranking for satisfaction with health care (24 of the 29 who received hospice were satisfied or very satisfied).
- Among the patients enrolled in hospice, increasing severity of complicated grief was correlated with satisfaction with hospice (p = .002).
- Increasing satisfaction with information provided about symptom management was associated with greater satisfaction with hospice services (p < .01).

What Would the Ideal Palliative Care Clinic Look Like for Parkinson's Disease?

Teresa Mangin, MD

Challenges Addressed by a Palliative Approach

- Unrealistic expectations on the part of patients and caregivers
- Caregiver burden
- Existential suffering
- Pain
- Psychosis
- Dysphagia and nutrition
- Communication problems
- Constipation
- Medication management

Members of the Ideal Palliative Care Team

- The patient
- Caregivers and families
- Nurse
- Social Worker
- Physicians neurologist, palliative care specialist, psychiatrist, others
- Speech therapist
- Physical and occupational therapists
- Psychologist
- Nutritionist
- Chaplain



Unrealistic Expectations

- Breaking the news that PD may result in death
- Helping families plan for inevitable decline in function
- Teaching the limits of medications and their specific roles
 - Tension between motor and cognitive function

Caregiver Burden

- Screening for caregiver strain or burden in clinic
- Providing support
 - Asking about this at each visit
 - Peer support over the phone if unable to leave pt
- Facilitating home help, both formal and informal
- Day programs for patient
- Offering programs geared toward caregivers (cognitive behavioral therapy, support groups)



Existential Suffering

- "a perceived threat to the integrity of the self, helplessness in the face of that threat, and exhaustion of psychosocial and personal resources for coping" -EJ Cassell
- Expressed by patients as feelings of hopelessness, futility, meaninglessness, remorse, death anxiety
- Leads to suffering and frustration on the part of the family



Existential Suffering: Some Truths

- This is normal and need not be totally controlled.
- There is no effective drug therapy.
- It leads to frustration in families and providers.
- Recognition of the factors involved in the individual patient helps to understand how to meet their needs.
- Relieving the suffering of the patient helps caregivers and providers.
- There is a distinction between fear of the dying process and fear of being dead.



Existential Suffering

- Treatment of attendant symptoms of pain, anxiety, depression, etc.
- Acceptance commitment therapy (ACT)
 - Branch of cognitive behavioral therapy
 - Incorporates mindfulness, acceptance, commitment and behavior change strategies to improve psychological flexibility
- Preserving patients' dignity



Pain

- Fear of pain is a common source of distress.
 - Relief of pain may take precedence over prolongation of life.
 - Reassure patient that his/her wishes will be honored and that pain will be controlled.
 - Identify and address fear of pain medications.
- Pressure sores
- Dystonic pain
 - May consider botulinum toxin injections
- Musculoskeletal pain
 - ROM exercises
- Ideally, have a pain management specialist in clinic with the neurologist.
 - Toronto Western Hospital



Management of Psychosis

- Streamlining medication regimen
- Reduction of dopaminergic medications
- Communicating with care facilities about preferred medications in PD
- Do not be afraid of clozapine!
- Psychiatry referral

Dysphagia

- ENT speech therapy for modified barium swallow
- Rehab speech therapy for teaching management strategies (chin tuck)
- Clarifying patient's wishes if swallowing is unsafe
- Discussion of and referral for G-tube if necessary and desired
- Nutrition consult

Communication Problems

- Often multifactorial in nature due to hypophonia, cognitive problems, bradyphrenia
- Lee Silverman Voice Therapy
- Enlisting speech therapist for communication board, other tools
- Allowing sufficient time for patient to respond

Medication Management

- Identifying priorities with respect to medication
- Simplifying regimen
- Eliminating medications that can contribute to cognitive side effects
- Educating about role of various medications (including those that are relatively contraindicated in PD)
- Strategies for medication reminders

References

- Clough & Blockley in Voltz et al., eds., Palliative Care Neurology, 2004
- Giles S. Palliative stage Parkinson's disease: patient and family experiences of health-care services. Pall Med 2009; 23: 120-5.
- Goy ER, Carter J, Ganzini L. Neurologic disease at the end of life: caregiver descriptions of Parkinson's disease and amyotrophic lateral sclerosis. J Pall Med 2008; 11: 548-54.
- Lanoix M. Palliative care and Parkinson's disease: managing the chronic-palliative interface. *Chronic Illness* 2009; 5: 46-55.
- Lieberson 1999. Treatment of Pain and Suffering in the Terminally III
- MacMahon DG. Use of apomorphine in clinical practice. Advances in neurology. 1999;80:529-33.
- Miller et al., Arch Neurol 2001;58:259-264;
- Miyashita M, et al. Care burden and depression in caregivers caring for patients with intractable neurological diseases at home in Japan. J of the Neurological Sci 2009; 276: 148-152.
- US Center for Disease Control, http://www.cdc.gov/nchs/data/nvsr/nvsr57/nvsr57_14.pdf

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