



# Variations In Advancing Parkinson's Disease



Things arise on our path through life. Some things we cherish, others we try to manage.



# Creating a picture of Parkinson's

- Let's use the life of a tree to assist in understanding Parkinson's disease
- Roots are the early part of the developing tree. A brief discussion of the factors genetic or biologic prior to show up of symptoms.
- The trunk of the tree may represent the early stages of Parkinson's.
- There can be many branches representing increasing symptoms. Today's focus on motor/ mobility, psychiatric, or cognitive will show possible symptoms.

# Roots of Parkinson's

- At this point, our primary focus is treating the symptoms of Parkinson's
- There is new evidence that regular exercise is helpful in preventing Parkinson's, especially in women.
- There is initial work on genetics and biological factors that may be involved in the development of Parkinson's



# Tree Roots

- The bottom portion of the tree and the roots applies to the predisposition for Parkinson's
- There is some limited evidence for genetic predisposition
- Current studies include review of some markers that may pre-date Parkinson's
- We are now adding biological factors to the investigation of the disease.
- Current data indicates a 25% reduction in Parkinson's for women who exercise regularly.

# Moving Up the Tree



# The trunk of the tree: motor symptoms

- This is the point where the previous conditions begin to have a physical effect.
- Motor fluctuations effect mobility including walking and may be influenced by fatigue or medications.
- In the early stages of the disease, medications generally facilitate continued mobility.
- It may be years before the medications become less effective.
- Dyskinesia makes large and small muscle movement more difficult to control.



# Motor complications of Parkinson's

Dyskinesia: Difficulty controlling muscle movements from foot or hand movements to whole body movements. Can vary with fatigue or time of day.

Dyskinesia sometimes treated with deep brain stimulation or Botox.

Falls can become frequent and may necessitate, cane, walker, wheelchair, or gait belt assistance.

# FALLS

- As Parkinson's advances and medications become less effective falls are likely to increase.
- Falls may be due to the Parkinson's but may also be due to perceptual changes.
- Falls causing injury including brain injury may indicate the need for increased supervision.
- Falls are likely to increase in times of fatigue.

# Psychological features of Parkinson's

Anxiety may be the first observed feature.

Noticing that things are changing in the motor or mobility area may begin anxiety or increase pre-existing anxiety.

As anxiety increases there may be attempts to control including doctor visits, use of alcohol or other medications, or relaxation.

## Depression

Increasing anxiety and concern about other symptoms may lead to depression.

Grief may be one kind of depression resulting from feelings of loss of health or safety.

Pre-existing depression may have a medical basis and relate to neurotransmitters.

# Hallucinations

Some Parkinson's patients will develop hallucinations.

Medications may play some part in these.

Lack of sleep is a significant factor.

Common auditory hallucinations include:

Thinking that someone is calling your name

Hearing music playing

Dogs barking or other nature sounds

Frequently occur when alone.

# Support for individuals with hallucinations:

Some people will be aware that the sounds are likely not real  
Auditory hallucinations frequently have a psychiatric basis  
With previous psychiatric conditions causing these hallucinations  
medications may be helpful.  
Arguing that the hallucinations are not real may not be helpful.

# Visual hallucinations

These hallucinations are generally linked to brain function

Common visual hallucinations include shadows, seeing people or animals, seeing things moving or changing.

Recently advertised medications are designed to assist with these.



Delusions:

Beliefs that can't be verified:

Paranoid: Belief that someone or something is trying to harm you in some way.

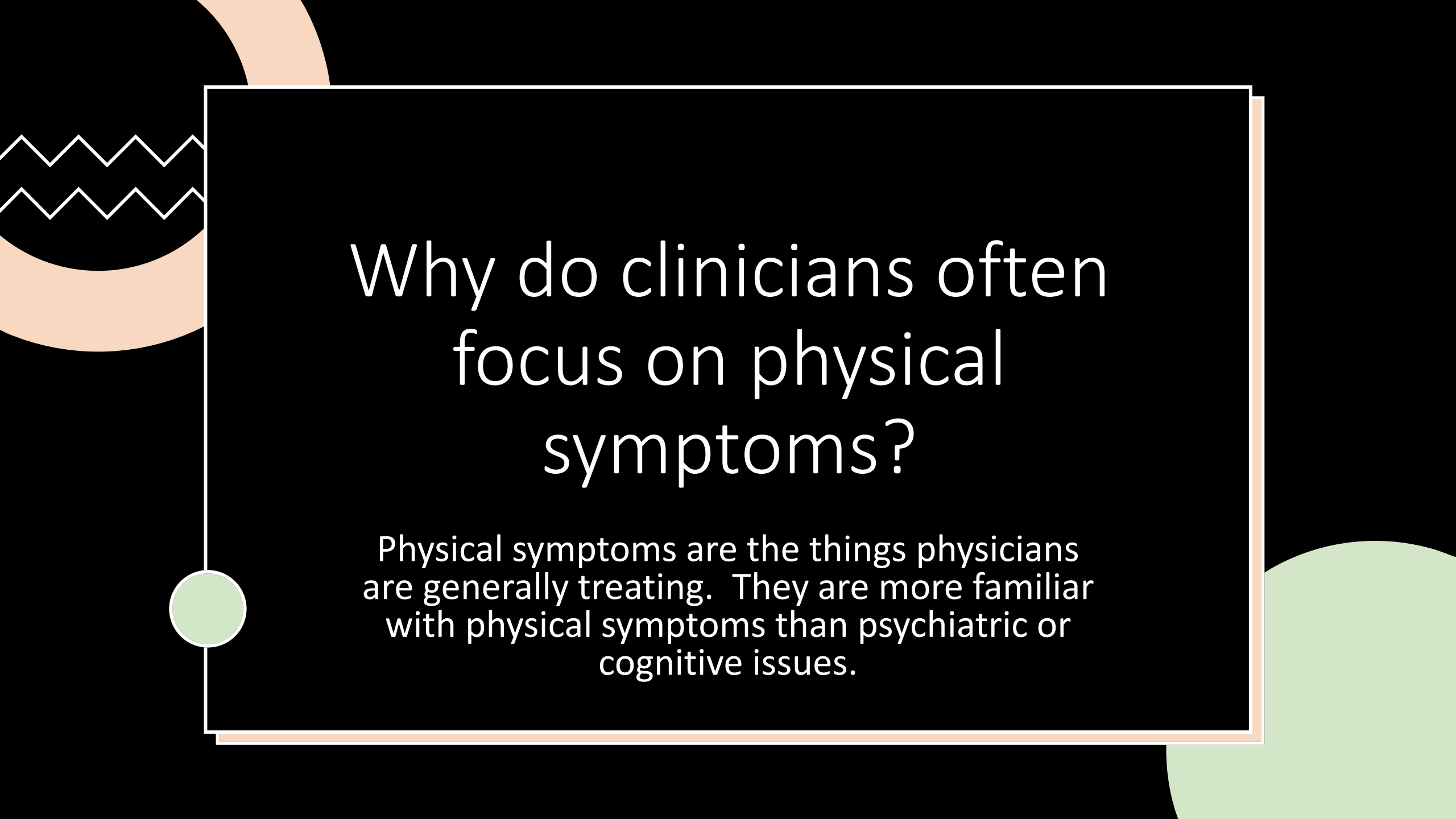
Grandeur: Believing that you have special powers. Thoughts that these powers give you control over others.

Dangers of Delusions:

Injury while trying to escape

Attacks on perceived perpetrators

Suicide thinking death would be better



# Why do clinicians often focus on physical symptoms?

Physical symptoms are the things physicians are generally treating. They are more familiar with physical symptoms than psychiatric or cognitive issues.

Motor and mobility issues:

Initially able to walk and stand unassisted

Difficulty providing self care and feeding

Decreased ability to perform daily activities

Decreased mobility including needing assistive devices such as canes, walkers, wheelchairs

Requiring bed or wheelchair without assistance.

# Therapies for physical symptoms

- Speech
- Physical therapy
- Occupational therapy
- Medical treatment
- Psychiatric/ psychological

# Therapies for motor symptoms

- Physical therapy for improved coordination
- Exercise training for strength
- Feeding to avoid weight loss and muscle wasting
- Observation to determine usual patterns (sedentary vs. “runner”)
- Identification of assistive devices for mobility



# Therapy for cognitive issues

- Identify techniques to assist with short term memory issues
- Note taking, calendars, phone reminders, post it notes
- Assistance for long term memory.
  - Picture books, recordings (music or reading)
  - Make a timeline of notes and pictures of life
  - Phone calls and visits to friends
  - Exercise



# Delirium and Dementia

- Delirium:
  - Usually rapid onset
  - Frequent medical causes
  - Confusion and disorientation
  - Can respond to medical treatment
  - Time limited
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- Dementia:
  - Slower progression
  - Several types resulting in loss of cognitive function
  - Unusual behaviors
  - Increased incidence of being lost
  - Decreased awareness of surroundings
  - Speech changes
  - Difficulty recognizing others
  - Loss of sense of self