Pulmonary Rehabilitation and Palliative Care

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Outline

1. Define palliative care and end of life care
   - Palliative Care in COPD

2. Patient Perspectives on Palliative Care in COPD
   - Barriers to Communication

3. Pulmonary Rehabilitation and Palliative Care
   - Dyspnea, depression management
   - Advance Care Planning

4. Case discussion
Palliative Care: WHO definition

Patient and Family

Quality of Life

Anticipate
Treat
Prevent

Needs

Intellectual
Emotional
Spiritual

Autonomy

Information
Choice
Palliative vs. End of Life Care

A. Traditional model:
   - Linear care

B. Lynn and Adamson model:
   - Overlapping care

C. ATS model:
   - Converging care
Palliative Care in COPD

• Transition from asymptomatic to rapid development of functional impairment and disability

• Declining function punctuated by acute exacerbations

• Increasing breathlessness, anxiety, weight loss, muscle wasting
Palliative Care Issues in COPD

- Breathlessness
- Pain
- Exhaustion/Fatigue
- Sleep disturbances
- Anxiety and depression
- Social isolation
- Family dynamics
- End of Life Decisions
Palliative Care in COPD

Why is it important? Patients want:

1. Honest and clear information about the progressive nature of disease

1. To hope for and expect the best, and prepare for the worst

1. To know what treatments are available to manage advanced disease
   - mechanical ventilation
   - Intubation
   - palliative care strategies i.e. medications, non-pharmacologic techniques to manage dyspnea, anti-depressants, oxygen therapy

Often addressed too late
Palliative Care in COPD: Patient Perspective

- Only a minority of patients with moderate-to-severe COPD discuss treatment preferences and end-of-life care issues with their physicians.

- Most believe that their physicians do not know their preferences for end-of-life care.

- One study interviewed 50 patients with COPD:
  - Nearly all suffered from anxiety and depression.
  - Almost none of them received specialist palliative care (in contrast to those patients with cancer).
Palliative Care in COPD: Patient Perspective

SUPPORT trial

- Lung cancer vs. COPD
  - Patients with COPD were more likely to die in the ICU, on mechanical ventilation, and with dyspnea
  - Most patients with COPD preferred comfort over prolonging life
  - More patients with COPD were likely to be intubated or receive CPR
Physician Perspective/Barriers

- Uncertainty:
  - Disease trajectory
  - Prognostication
    - Are BODE and ADO sufficient?
  - Patient readiness

- May feel ill-prepared to deliver bad news

- View palliative care and advance care planning as “conceding” to the disease

- May be overly optimistic about likelihood of survival
Question:

How can we improve palliative care delivery to patients with COPD and other chronic respiratory diseases?
Pulmonary Rehabilitation and Palliative Care

- Introduce and reinforce palliative treatments
  1. Manage and reduce dyspnea
  2. Address anxiety and depression
- Address Advance Care Planning
Dyspnea Management: Oxygen Therapy

- Dismiss myths and clarify misconceptions
  - Breathlessness ≠ low oxygen levels
  - “Addiction” to oxygen

- Encourage use through peer discussion
  - Working through embarrassment issues
  - How to carry deliver device in public
  - Tolerating nasal cannula
Dyspnea Management: Opioids

- For refractory dyspnea (advanced or terminal disease)
  - Given orally or systemically
  - Morphine 10-30 mg daily
  - Less evidence for nebulized forms

- Opportunity to discuss issues of addiction, safety, and potential benefits
  - No increase in mortality or SaO2
  - Some studies showed increase in PCo2
  - Constipation, nausea, drowsiness
Dyspnea Management: NIPPV

- Some studies show that home NIPPV improves dyspnea and HRQL, but still controversial
- May be used to palliate symptoms when more aggressive interventions are no longer possible or desired
Dyspnea Management: Non-traditional Modalities

- Fans
  - cold air blowing across the cheeks can help sense of breathlessness

- Walking aids
  - may be helpful in reducing dyspnea and improving distance walked

- Neuromuscular electrical stimulation
- Relaxation techniques
- Acupuncture/acupressure
Pulmonary Rehabilitation: Anxiety and Depression

- Reduce anxiety and depression through self-efficacy, empowerment

- Exercise component can improve endurance and reduce anxiety, improve cognitive function

- Uncover the need for pharmacotherapy
  - Treatment can decrease dyspnea and improve HRQL
Advance Care Planning

- Identifying the patient’s goals of care
  - Treatment preferences
  - End of life preferences
  - Living Will
  - Surrogate/POA
Pulmonary rehabilitation and Advance Care Planning

- Provides forum for communication and education
- Potential to improve trust between patients, families, and caregivers
- Can ensure that providers understand patient’s wishes, especially in crisis or end of life situations
Case

• Patient is a 62 year old man with Stage 4/D COPD

• In and out of hospitals >10 times in the last year for COPD exacerbations

• Intubated twice in the last year

• Was prescribed 4L oxygen continuously upon his most recent discharge but is scared this is going to prevent him from getting a lung transplant in the future
• He still smokes ½ pack of cigarettes per day

• He takes care of his wife, who has metastatic renal cell; hardly has time to care for himself

• Physical Exam
  • thin and frail main who looks older than stated age
  • barrel chest; diminished breath sounds through out all lung fields
  • 3+ pitting lower extremity edema
• Medications:
  • Roflumilast
  • Symbicort
  • Xopenex
  • Spiriva
  • Prednisone (pretty much chronically)
- FEV1/FVC ratio: 0.35
- FEV1: 15% predicted
- DLCO: 22% predicted
- 6 min walk distance: 492 feet (around 10-15th percentile for age)

- He was wearing 4L O2 with the walk and still desatted from 100% at rest to 92% with exertion
Discussion

1. How can pulmonary rehabilitation help this gentleman?

2. What palliative measures/discussions should be addressed at this point in his disease?