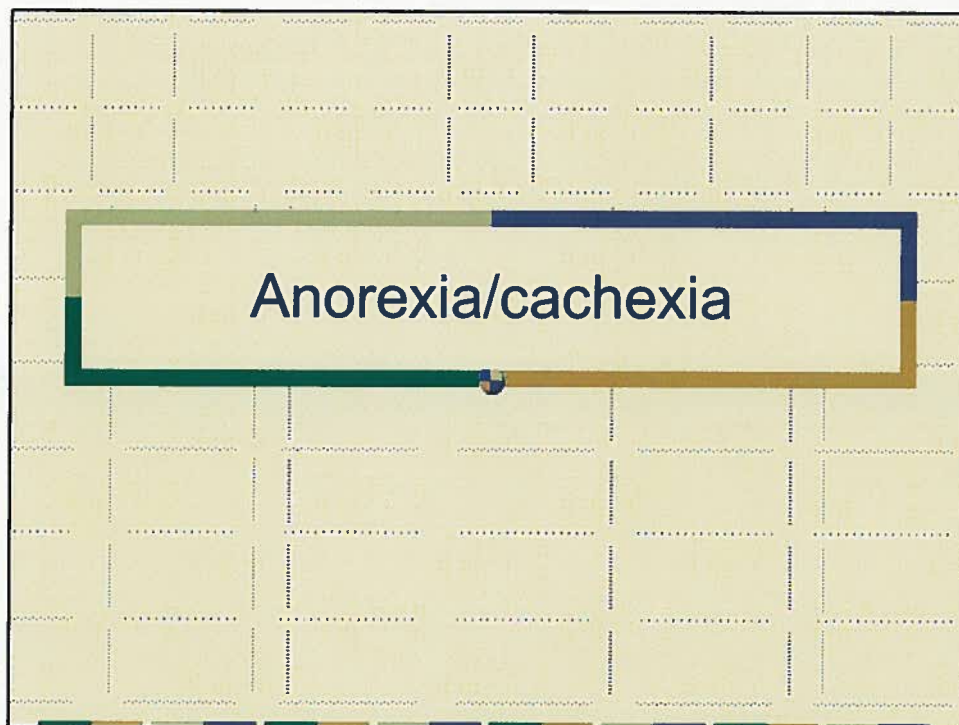


Symptom Management II

Jennifer Reidy, M.D.
Merrimack Valley Hospice

Objectives

- Review assessment & treatment of:
 - Constitutional symptoms: anorexia/cachexia, fatigue
 - Fluid balance: edema, ascites
 - Insomnia



Case: Carlos

- 68 yo man with gastric cancer
- Lived most of his life in poverty in Puerto Rico, with poor access to health care
- Now cared for by daughter in Lawrence
- "He's not eating or drinking – he'll starve to death!"

Definitions

- Anorexia: loss of appetite & reduced caloric intake
- Cachexia: involuntary loss of more than 10% of pre-morbid weight, a/w loss of muscle, visceral protein and lipolysis
- Starvation: loss of weight, a/w loss of fat (protein conserved until severe)

Pathophysiology

- Anorexia/cachexia is complex, multifactorial:
 - Underlying disease state
 - Tumor by-products: proteolysis-inducing factor, lipid-mobilizing factor
 - Chronic inflammation
 - Host cytokines: IL-1, IL-6, TNF, interferon
 - Metabolic, neuroendocrine, anabolic derangements

Secondary causes

- Psychological factors
 - Anxiety, depression
 - Family distress
- Eating problems
 - Altered smell, taste
- Oral problems
 - Dentures
 - Mouth sores, thrush
 - Dry mouth
 - Dysphagia
- Malabsorption
 - Pancreatic dx, diarrhea
- Digestive problems
 - Early satiety
 - Nausea/vomiting
 - Constipation
 - Bowel obstruction
- Functional
 - Pain, fatigue
- Metabolic disorders
 - Diabetes
 - Hypogonadism
 - Adrenal insufficiency
 - Thyroid insufficiency

Cardiac cachexia

- Weight loss >7.5% of premorbid normal weight over > 6 mos
 - Nonedematous, nonintentional weight loss
- Mortality is 50% at 18 mos
 - Independent of age, functional status, LVEF
- General loss of fat, lean & bone tissue
- Increased epinephrine, norepinephrine, cortisol, renin, aldosterone levels
- Increased levels of TNF-alpha

Other non-cancer ACS

- COPD
- AIDS
- Chronic kidney disease
- Cirrhosis
- Dementia
- Chronic infections (TB, malaria)
- Autoimmune disease (rheumatoid arthritis)

Poor prognosis

“Without exception, anorexia-cachexia presages a short life span across the full range of chronic illnesses and among elderly people.”

MacDonald Neil. J Support Oncol 2003;1:279-86.

Carlos: perceptions, emotions

	Facts	Feelings	Identity
Patient	"I'm not very hungry."	"I'm afraid to disappoint my daughter."	"Am I a good father? She might think I don't want to live (for her)."
Daughter	"My father isn't eating very much."	"I'm afraid he's suffering from starvation." "I don't want him to die and leave me."	"Am I a good daughter? How can I allow my father to suffer?"
Hospice team	"He has anorexia-cachexia due to end-stage cancer."	"I feel anxious, defensive, tired at times of conflict over this issue."	"Am I an effective hospice clinician? Why can't I get them to understand?"

Adapted from Stone D, Patton B, Heen S. Difficult Conversations. Penguin Books. 1999.

Education about ACS

- Explain differences between ACS and starvation
- "The disease is robbing calories and energy from your body."
- "It's not your fault, nor your daughter's fault, that you're losing weight."

Dietary habits in dying people

- Prospective study of 151 advanced cancer pts' dietary records ~7 mo before death
- Analyzed:
 - macronutrient content (3 patterns: milk & soup, fruit & white bread, meat & potato)
 - energy intake (highest=meat & potato)
 - weight loss history (highest=milk & soup)
 - time to death (not statistically significant)

Hutton, JL et al. Am J Clin Nutr 2006; 84:1163-70.

Results...

- Even patients with highest intakes had weight loss (i.e., diets not sufficient to maintain weight).
- **Frequency** of eating was important in total energy intake
 - Recommend high-nutrient & calorie snacking
- Patients preferred **typical foods** eaten by healthy people
 - Most patients did not choose nutritional supplements

Medications

- All effects seem short-term; weight gain is fat & water, not muscle
- dexamethasone 4-8mg/day; many side effects
 - Megestrol acetate (Megace) → 160-800mg/day
 - Expensive; risk of DVT
 - Metoclopramide (Reglan) → if due to early satiety
 - Dronabinol (Marinol) 2.5mg bid-tid

Fatigue

Case: Renee

- 82 yo woman with leukemia
- Symptoms well palliated
- Hopes to complete a letter and gift to grandchild and friend
- Complains of severe fatigue – “I can’t do anything because I’m so tired.”

Risk factors for fatigue (asthenia)

- | | |
|---------------------------------------|--|
| • Cancer | • Pain |
| • Lack of sleep | • Dehydration |
| • Chemotherapy,
radiation, surgery | • Infections (HIV, TB) |
| • Medication side
effects | • Endocrine disorder
(hypothyroidism) |
| • Depression | • Electrolyte
abnormalities |
| • Hypoxia | • Anemia |
| | • Malnutrition |
| | • Emotional stress |

Treatment of fatigue

- Treat risk factors as able
 - Blood transfusion for anemia
 - Reassurance, education about normal changes at end of life
 - Realistic expectations
 - Energy conservation
 - "Listen to your body"
- Medications:
 - Corticosteroids
 - Duration of effect only 2-4 weeks
 - Psychostimulants
 - Ritalin
 - Provigil



Fluid imbalance: ascites & edema

Case: Carol

- 45 yo woman with metastatic carcinoma of unknown primary
- Abdominal distension, bloating, nausea/vomiting, hiccups
- Intense emotional, spiritual distress & family conflict

Assessment

History:

- When did it begin?
- Does your abdomen seem bigger lately? Clothes tighter?
- Do you weigh yourself or measure your abdomen?
- Other sx's: dyspnea, pain, LE edema, fever, chills, change in urine output?

Physical exam:

- Vital signs
- Appearance
- Heart & lung exam
- Abdominal exam
 - Fluid wave?
- Extremities
 - Edema, perfusion

Ascites

Common etiologies:

- End-stage liver disease (80%)
- Malignancy (10%) – ovarian, endometrium, colon, gastric, pancreatic ca
- Congestive heart failure (3%)
- Other (7%)

Symptoms:

- Nausea
- Abdominal discomfort, bloating
- Dyspnea
- Hiccups

Treatment of ascites

- Treatment of underlying cause!
- Diuretics
 - Furosemide (Lasix), spironolactone (Aldactone)
- Chemotherapy (if applicable)
- Octreotide
- Paracentesis
 - Indwelling catheter for removal of ascites at the bedside at home

Case: Bill

- 65 yo man with rectal cancer
 - Pelvic masses
 - Pulmonary nodules
- Worsening lower extremity edema – “what can I do?”

Assessment

History:

- How long?
- Where located?
- Other symptoms?
- Medications?
- Skin breakdown?

Physical exam:

- Location of edema
- Severity of edema
- Heart & lung exam
- Skin exam

Edema

Common etiologies:

- Congestive heart failure
- End-stage liver disease
- Poor nutrition, cachexia (low protein stores)
- DVT
- Medication side effect (steroids, calcium channel blockers)

Symptoms:

- Often asymptomatic
- Dull, aching pain
- Stasis dermatitis, ulcers
- Itching
- Pain from cellulitis

Treatment of edema

- Treat underlying cause, if able
- Diuretics (if applicable)
- Compression stockings (caution with weeping/broken skin or PVD)
- Elevation of extremity
- Consider subcutaneous drainage



Insomnia

Case: Louise

- 57 yo woman with pancreatic cancer
- Very active, energetic person; family caretaker
- History of depression, anxiety
- Sudden diagnosis & intense emotional, spiritual distress
- Tight-knit family, history of losses and alcoholism

Louise (con't)

- Never wants to sleep
 - "I have a lot of things to do"
 - "I'm afraid I won't wake up"
- Able to stay awake for up to 3 days (with frequent cat naps) then crashes & sleeps 12-24 hours → repeats cycle again
- Family is "going crazy"

Causes of sleep disturbance

- | | |
|--|--|
| <ul style="list-style-type: none"> • Changes in day/night cycles due to illness <ul style="list-style-type: none"> • Naps during day • Lack of sunlight, activity • Pain or other symptoms • Depression, anxiety | <ul style="list-style-type: none"> • Medication side effect (stimulants, bronchodilators, steroids, SSRI's; drug withdrawal) • Sleep apnea • Restless legs syndrome |
|--|--|

Treatment of sleep disturbance

- Assess goals of care
 - Is it a problem?
 - What are the benefits/burdens of treatment?
- Assess for underlying cause
- What were pt's previous sleep habits?
- Review current sleep habits
 - Onset, duration
 - Meds, caffeine, alcohol

Treatment

- Encourage good "sleep hygiene"
 - Regular sleep-wake schedule
 - Exposure to daylight
 - More daytime activity
 - Minimize naps if possible
 - Avoid caffeine, nicotine qhs
 - Ensure pain relief qhs

Treatment...

- If intractable, consider trial of medications
- Help caregivers cope as best able
 - Caregivers can easily burnout from lack of sleep
 - Schedule caregivers to take turns being with pt at night

Medications

- Marginally effective & have side effects
 - In meta-analysis, NNT = 13 and NNH = 6!
- Drugs with sedating side effect
 - diphenhydramine (Benadryl) 25 mg qhs
- Hypnotics
 - zolpidem (Ambien) 5-10 mg qhs (1/2 life=2.5 hrs)
 - eszopiclone (Lunesta) 2-3 mg qhs (1/2 life=6 hrs)
 - zaleplon (Sonata) 5-20 mg qhs (1/2 life=1 hr)
- Anxiolytics
 - Lorazepam (Ativan), et al.
→ choose short or medium 1/2 life drug