Managing Cancer Related Insomnia and Fatigue

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Objectives

• To understand the causes and effects of cancer related insomnia and fatigue
• To review the possible treatments for these common side effects
• To discuss tips for healthy living including lifestyle modification
• Question and answer period
Insomnia

An overview
What is insomnia?

- Sleep disorder causing poor quality or quantity of sleep
- Despite having adequate time and opportunity to sleep:
  - Difficulty falling asleep
  - Difficulty staying asleep
  - Waking up often during the night
  - Waking up too early in the morning
  - Feeling tired upon waking
Types of insomnia

• Primary
  ▫ Not associated with a medical, psychiatric or environmental cause

• Secondary
  ▫ Due to a health condition, medication, lifestyle change or other substance use
Classes of insomnia

- **Acute**
  - Occurs in 30-50% of population
  - Short-term
  - Lasts one night to ≤ 3 weeks

- **Chronic**
  - Occurs in about 10% of population
  - Long term
  - Occurs at least 3 nights/week and lasts ≥ 1 month
Causes of insomnia

- Stress – life change (death, job, move, divorce)
- Illness (GERD, sleep apnea, hyperthyroid)
- Emotional distress (PTSD, anxiety, depression)
- Physical discomfort (pain, reflux, frequent urination, hot flashes)
- Environmental factors (hot, cold, light, noise)
- Some medications
- Other drug use (caffeine, alcohol, illicit drugs)
- Interference with normal sleep schedule (jet lag, shift change, travel for work)
Specific in Breast Cancer Treatment

- Aromasin (anastrozole)
- Arimidex (exemestane)
- Faslodex (fulvestrant)
- Ixempra (ixabepilone)
- Tykerb (lapatinib)
Symptoms of insomnia

- Sleepiness during the day
- Overall feeling of tiredness, lack of energy
- Feeling irritable, mood changes
- Poor attention and/or concentration
- Increased errors or mistakes, memory problems
- Poor social function
- Headaches
- Anxiety
Available treatments for insomnia

What can help you get a better night’s sleep?
Treat problems associated with insomnia

- Anxiety/depression
- Pain
- GI and GU disturbances
- Respiratory disturbances/cough
- Hot flashes
Be aware of medications that may worsen the problem

- Sleep medications (sedatives, hypnotics)
- Chemotherapy
- Opioids
- Steroids
- Anticonvulsants
- Thyroid medications
- Atenolol/propranolol (beta blockers, tx HTN)
- MAO inhibitors (tx depression)
- Oral contraceptives
- Adrenocorticotropicin (pituitary hormone that stimulates adrenals)
Cognitive behavioral interventions

- As effective as conventional therapies in treating primary chronic insomnia with no side effects
- Several large studies have shown the following may help
  - Cognitive restructuring
  - Behavioral strategies
  - Relaxation
  - Basic sleep hygiene education
- May need to use more than one intervention
Cognitive Restructuring

- Restructure negative thoughts, beliefs and attitudes related to sleep
- Prevent excessive monitoring or worrying about getting enough sleep
- Limit time in bed that does not involve sleeping
Behavioral Strategies

• Control stimulus
• Control sleep restriction
• Limit time spent in bed that does not involve sleep
Relaxation

- Guided imagery
- Prayer
- Massage
- Meditation
Sleep Hygiene

- Sleep and wake up at regular times
- Relax before bedtime
- Create a dark, comfortable environment
- Avoid watching TV or working in the bedroom
- Get ample daylight during non-sleep hours
- Avoid naps
- Limit caffeine
- Get regular exercise but no closer than 3 hours before bedtime
Pharmacologic Agents to Promote Sleep

- When all else fails
- For short term use
- May be habit forming
- Have not been well studied in cancer populations therefore risk/benefit ratio unknown
- Speak to your health care provider
Agents commonly used

- Non-benzodiazepine (Sonata, Ambien, Lunesta)
- Benzodiazepine (Xanax, Ativan, Klonopin, Restoril)
- Melatonin receptor agonist (Rozerem)
- Antihistamine (Benadryl, Atarax, Vistaril)
- Tricyclic antidepressant (Elavil, Restoril)
- 2nd generation antidepressant (Desyrel, Remeron)
- Antipsychotic (Seroquel, Thorazine)
- Chloral derivative (chloral hydrate)
Dietary/botanical supplements

- **Melatonin**
  - May help when using drugs known to alter normal melatonin production
  - Not effective in secondary sleep disorders
  - May help older patients initiate and maintain sleep
  - May interact with some chemo
  - Evidence inconclusive for antitumor activity

- **Cannabis and cannabinoids**
  - Limited data
  - May help in chronic pain syndromes
Other tips for management

• Go to bed only when sleepy
• Hide the clocks
• Try chamomile tea or “sleepy time” tea
• Consider a warm bath
• Try a warm glass of milk
• Consider a “noise machine” or relaxation tape
• Try earplugs or a sleeping mask
Other things to avoid

- Naps longer than 30 minutes during the day
- Having your phone or other electronic device near you during the night
- Drinking lots of fluid before bedtime
- Alcohol before bedtime (may help you fall asleep but can wake you up during the night)
- Smoking before bedtime (nicotine is a stimulant)
- Thinking about what you need to accomplish when you lay awake
- Staring at the clock
Fatigue
An overview
What is fatigue?

- Persistent sense of tiredness that interferes with normal function
- Daily lack of energy
- Improved by sleeping or resting
Cancer Related Fatigue

- Most common side effect experienced by cancer patients
  - 14-96% reported in patients during tx
  - 19-82% reported in patients post-tx
- Often described as “paralyzing”
- Can occur suddenly
- Not due to activity or exertion
- Not improved by resting or sleeping
- May not end when treatment is completed
Classes of fatigue

- Acute
  - Lasts one month or less
- Chronic
  - Lasting from one month to 6 months or longer
Causes of cancer related fatigue

- Cancer treatment
  - chemo, radiation, surgery, biologic tx, hormonal tx
- Anemia
- Tumor induced hyper metabolic state
- Hypothyroidism/other metabolic disorders
- Decrease nutrition or dehydration
- Mediations used to treat side effects
- Pain and opioids use to treat pain
- Depression
- Sleep disorders
- Infection
- Nausea/diarrhea
Symptoms of fatigue

• Whole body tiredness or weariness
• Generalized weakness or body heaviness
• Feeling of exhaustion
• Lack of energy or “pep”
• Feeling of slowness
Fatigue can affect:

- Mood
- Physical function
- Work or school performance
- Social interaction
- Family life
- Cognitive performance
- Sense of self
What are the treatments for fatigue?

Will this tiredness ever go away?
Treat problems associated with fatigue

- **Anemia**
  - May require blood transfusion
  - Increase iron rich foods and vitamins (B12, folate)

- **Pain**
  - Start or change pain medication
  - May need increase or decrease in dose

- **Depression**
  - May need antidepressant
  - Psychosocial support
Cognitive behavior therapy

- Therapy focusing on thoughts and behaviors
- Small study focused on possible factors leading to fatigue led to significant decrease in fatigue
- Number of therapies depended on factors present
  - Insufficient coping with cancer experience
  - Fear of disease recurrence
  - Dysfunctional cognition regarding fatigue
  - Dysregulation of sleep
  - Dysregulation of activity
  - Low social support/negative social interactions
Best recommendation - EXERCISE

• Shown to improve fatigue in numerous studies
  ▫ Can reduce fatigue by 35% and improve vitality by 30%
• Increases ability to participate in activities of daily living
• Improves quality of life and satisfaction with life
• Improves sense of well-being
• Improves appetite
• More able to meet demand of cancer and its treatment
Exercise

- Choose an activity you enjoy
- Moderate activity best but start slow
  - Start with 15-20 mins/day
  - Walking great exercise
  - Add strength training when able
- 3-5 hours per week recommended
- Safe during and after treatment ends
Proper Nutrition Important

- Healthy diet full of fruits, vegetables and whole grains
- Talk to a dietitian to meet your particular needs
- Protein very important (1/2 gram of protein for each pound you weigh)
- If you are not eating well, consider a multivitamin
- Water and liquids extremely important
  - Caffeinated beverages can cause dehydration
Mind-Body Exercises and Therapies

- Some studies have shown effect on improving fatigue – research continues
  - Qigong
  - Tai Chi
  - Reiki
  - Yoga/meditation
  - Muscle relaxation with relaxation breathing
  - Massage/aromatherapy
  - Healing Touch
  - Acupuncture
Energy Conservation/Activity Management

• Found in a large study of mostly breast cancer pts to have a modest effect on fatigue
• Learn skills to utilize energy
• Balance rest and activity
• Set priorities of things you want to accomplish during the day and save your energy for those activities
• Plan high energy activities when peak energy
• Learn to delegate
Education/Information Provision

- Studies suggest that educational interventions such as teaching, counseling, support and anticipatory guidance can help reduce fatigue levels
- Learn about fatigue patterns
- Coping skills training and coaching
Optimize sleep quality

- Five studies have shown that cognitive-behavioral interventions to optimize sleep quality may also improve fatigue
- Interventions included
  - Relaxation training
  - Sleep consolidation
    - avoid naps, limit bedtime to actual sleep
  - Stimulus control therapy
    - go to bed only when sleepy, use bed only for sleep or sex, set a consistent time to go to bed and wake up, avoid caffeine and stimulating activity at night
  - Reduce cognitive-emotional arousal
    - Relax 1 hr before bed, establish pre-sleep routine
Abiraterone Acetate (Zytiga)

- Drug currently approved for metastatic prostate cancer
- Study of metastatic prostate cancer patients
- May be of benefit along with prednisone
- Clinically meaningful improvement in fatigue compared with prednisone alone (55% improvement vs 38%)
Ginseng

- In recent clinical trials, this herb was found to help alleviate cancer related fatigue
- 2000 mg given daily over an 8 week period
- Study found effects best after 2 months of use
- Improved fatigue scores in patients receiving chemo and radiation by ≥30%
Modafinil (Provigil) and Methylphenidate (Ritalin)

- Psychostimulants
- Not FDA approved for cancer related fatigue but studies show possible improvement for patients with severe fatigue
- Can have side effects including insomnia, euphoria, headache, nausea, anxiety, and mood changes
- Cardiovascular complications can also arise
Benefits balanced with harms

• Correction of anemia with recombinant human erythropoietin
  ▫ Used to correct anemia with Hg < 10 g/dl
  ▫ May increase vigor and diminish fatigue
  ▫ Best if Hg 11-12 g/dl
  ▫ Well tolerated
  ▫ Safety issues including small risk of clots, HTN, concerns it may support or extend tumor growth in solid tumors
Other Tips to Manage Fatigue

• Talk to your health care provider
• Use your resources!!!
  ▫ It is OK to ask for help
• Keep a journal
• Balance rest and activities
  ▫ Organize your day
• Reduce stressors – learn to cope
• Know and accept you may have limitations
Final Words

• Cancer and its treatment is unique to each individual
• Insomnia and fatigue are two common side effects which cancer patients may experience
• Modify the things you can in your daily life
• Establish great communication with your health care providers and loved ones
• You are not alone – know your resources
Take care of wonderful you!