Cancer Care Ontario

Action Cancer Ontario

Symptom Management Pocket Guide:

LOSS OF APPETITE

As of March 2024, this Symptom Management Clinician Algorithm is IN REVIEW. This means that it is undergoing a review for currency and relevance. It is still appropriate for this document to be available while this updating process unfolds.

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Loss of Appetite

Definition of Terms

The first step in managing this symptom will be validation of Edmonton Symptom Assessment System (ESAS) score with patient. An understanding of primary cachexia and how it differs from anorexia is needed to establish whether you are dealing with anorexia, secondary cachexia or primary cachexia.

Definitions

Anorexia is the loss of appetite or the desire to eat.

Cancer Cachexia is a multifactorial syndrome characterized by an ongoing loss of skeletal muscle mass (with or without loss of fat mass) that cannot be fully reversed by conventional nutrition support and leads to progressive functional impairment. Weight loss is evident. Losses associated with cancer cachexia are in excess of that explained by anorexia alone; however anorexia can hasten the course of cachexia.

Secondary Cachexia: is characterized by potentially correctable causes that could explain the syndrome. Once identified, prompt intervention can greatly impact the patient's quality of life and overall prognosis.

Primary Cachexia should only be considered when all secondary causes have been identified and treated.

Sarcopenia is a condition characterized by loss of muscle mass and muscle strength. Patients presenting with loss of muscle mass, but no weight loss, no anorexia, and no measureable systemic inflammatory response may well be sarcopenic.

Recent literature encourages the staging of primary cachexia to support patients and potentially improve the type and timing of treatment modalities (Figure 1).

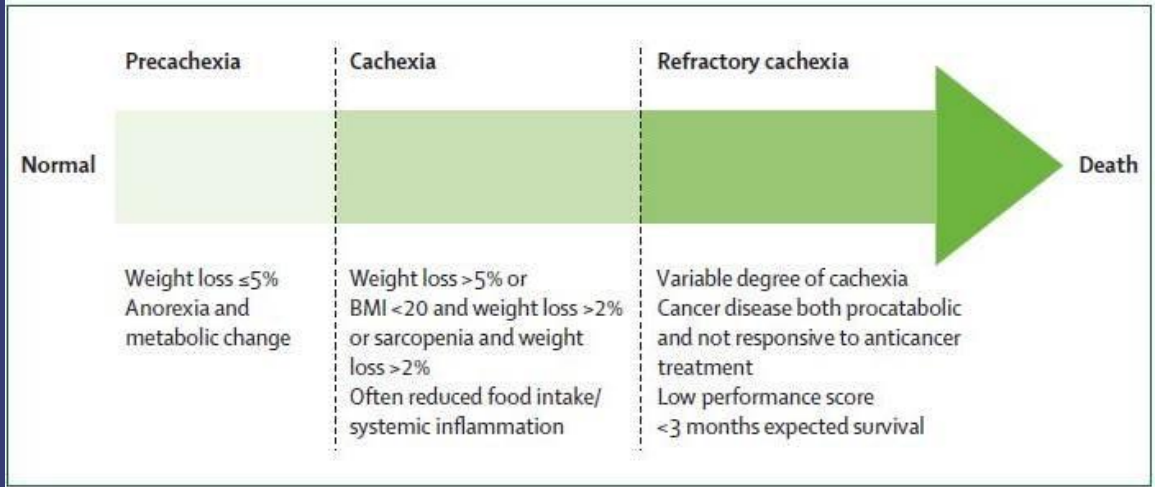

Figure 1: Stages of primary cachexia

Diagnosis

Establish whether loss of appetite is related to treatment side effects (e.g. radiation therapy, chemotherapy, or surgical treatment), other medication and/ or psychosocial factors. If these factors are not deemed to be causative then tumor related factors may be at work and determination of the physical vs. metabolic factors should be further considered. See table 1 for causes of anorexia and secondary cachexia.

Cause	Description	Anorexia	Secondary Cachexia
Tumour related	Factors secreted by tumour (e.g. tumour necrosis factor/cachectin, interleukin-6, lipid-mobilizing factor, proteolysis-inducing factor)	√	
	Metabolic and hormonal abnormalities (e.g. alterations in carbohydrate, lipid and protein utilization synthesis and breakdown)	√	
	Taste and smell abnormalities or food aversions	√	√
	Dysphagia		√
	Dyspnea		√
	Fatigue / malaise and asthenia (cycle can occur in which decreased intake leads to lethargy and weakness, leading to a further decrease in oral intake)	√	√
	Gut involvement (e.g. intraluminal gastrointestinal malignancy, gut atrophy, partial bowel obstruction, decreased production of digestive secretions, decreased peristalsis, constipation)	√	√

Cause	Description	Anorexia	Secondary Cachexia
Tumour related	Malabsorption Syndrome (fats and carbohydrates not metabolized/ absorbed)		√
	Pain	√	√
	Infection (e.g. low grade sepsis)	√	
	Early satiety	√	
Surgical, Systemic and Radiation Treatment related	Constipation	√	√
	Diarrhea (e.g. cytotoxic effects on the gut mucosa/ radiation enteritis/ short bowel syndrome)	√	√
	Dysphagia		√
	Fatigue	√	√
	Nausea/Vomiting	√	√
	Pain	√	√
	Taste and Smell abnormalities	√	√
	Xerostomia (e.g. mucositis, infection, poor hygiene, dehydration, medication, taste bud alternation)	√	√
	Palliative gastrectomy	√	√
Commonly used Medications	Opioids	√	
	Systemic antineoplastic drugs (e.g. chemotherapy, targeted therapy, interferon)	√	
	Antimicrobial agents	√	
	Antidepressants (e.g. selective serotonin reuptake inhibitors such as fluoxetine, sertraline, escitalopram, paroxetine; atypicals such as bupropion)	√	

Cause	Description	Anorexia	Secondary Cachexia
Psychosocial factors	Anxiety	√	√
	Depression	√	√
	Delirium		√
	Fear of eating because of possibility of making symptoms worse (e.g. pain, incontinence, diarrhea, constipation) or because of certain beliefs that eating will make the cancer, symptoms, or health worse.	√	
	Lack of emotional support	√	√
	Lack of functional support/independence	√	√
	Lack of financial resources/support	√	√

The **causes of primary cachexia** are also tumour-related causes of anorexia:

- factors secreted by tumour (e.g. tumour necrosis factor/cachectin, interleukin-6, lipid-mobilizing factor, proteolysis-inducing factor) , and

- metabolic and hormonal abnormalities (e.g. alterations in carbohydrate, lipid and protein utilization synthesis and breakdown).

Assessment

Ongoing comprehensive assessment is the foundation of effective anorexia and cachexia management. An in-depth assessment should include:

- review of medical history with current medication(s),
- review of treatment plan/effects and clinical goals of care,
- weight and diet history,
- physical assessment,
- available laboratory investigations, and
- review of psychosocial and physical environment.

Consider the following validated tools for further screening and in-depth assessment:

- Malnutrition Screening Tool (MST)
- Patient Generated Subjective Global Assessment (PG-SGA)
- Percentage of weight loss over time evaluates malnutrition:
  - > or equal 5% loss of usual body weight in one month.
  - > or equal 7.5% loss of usual body weight in 3 months.
  - > or equal 10% loss of usual body weight in 6 months.

Non Pharmacological Treatment

Stage of disease, progression of disease and Palliative Performance Scale (PPS), or functional status, should be considered when determining goals of care and treatment plans.

Psychosocial Strategies

- Provide emotional support to patient and family.
- Consider importance of food in the social context and impact on quality of life.
- Consider cultural issues
- Consider patient's accessibility to food.
- Referral to other health care professionals where appropriate.

Nutrition Education Strategies

Provide nutrition-focused patient education for self-management early in symptom trajectory with a goal to improve or maintain nutritional and functional status via oral nutrition.

- Suggest eating small, frequent meals and choosing high energy, high protein foods. See Patient Education tools below.
- Ensure adequate hydration, preferably through energy and protein containing liquids.
- Suggest making mealtimes as relaxing and enjoyable as possible.
- Suggest convenience foods, deli or take-out foods, Meals on Wheels® or catering services, Home Making services, or asking friends/family to help out.
- Taking medication with a high calorie / protein fluid such as milkshakes or nutrition supplements can also increase nutritional intake. This should be reviewed by a dietitian and/or pharmacist because of potential drug/nutrient interaction(s).
- Nutritional supplements, as recommended by a dietitian and/or pharmacist.

- Refer to a registered dietitian. See section below.

Patient Education tools:
- Healthy Eating Using High Energy, High Protein Foods
- High Energy and High Protein Menu items
- Food ideas to help with poor appetite
- Increasing Fluid Intake
- Suggestions for Increasing Calories and Protein
- Eating Well When You Have Cancer
- Canada's Food Guide

Exercise Strategies

- Encourage exercise, as tolerated by patient. Walking fifteen minutes a day can help regulate appetite.
- Patient should start the exercise regimen slowly, and gradually increase intensity.
- Exercise can be initiated at most levels above PPS 30-40% but caution should be guiding principle, as well as presence of bony metastases and low blood counts.

Referral to a Registered Dietitian

Individualized dietary counseling has been shown to reduce incidence of anorexia and improve nutritional intake and body weight, as well as improve quality of life.

Non-Pharmacological Treatment specific to Primary Cachexia: Refractory stage

- Consider Palliative Performance Scale (PPS) scores, in conjunction with ESAS scores, to determine appropriateness and aggressiveness of interventions.
- Assist families and caregivers to understand and accept benefits and limits of treatment interventions, and to look at alternate ways to nurture patient (oral care, massage, reading, conversing).
- While underlying cause(s) may be evident, treatment may not be indicated.
- Ice chips, small sips of beverages and good mouth care becomes norm.
- Consider symbolic connection of food and eating with survival and life. Food may become a source of emotional distress experienced by both family and patient.
- It is important to educate that a person may naturally stop eating and drinking as part of illness progression and dying process.
- Focus should be on patient comfort and reducing patient and caregiver anxiety, as reversal of refractory cachexia is unlikely.
- Recognize that discontinuation of nutrition is a value-laden issue. Consider consultation with registered dietitian, spiritual counselor or bioethicist, to clarify clinical goals.
- Referral to other health care professionals where appropriate.

Pharmacological Treatment

The following pharmacological treatments are suggested to alleviate the symptom of loss of appetite and may improve quality of life. They may affect weight gain; however weight gain may be attributable to water retention and/or fat, not muscle gain.

- Appetite stimulants can be used in combination with or after failure of oral nutritional management.
- Use of appetite stimulants is particularly warranted in patients with incurable disease. Appetite stimulants can be administered to patients with any type of tumour.
- The optimal mode of administration for these products is not known.

Please refer to the drug table on next page.

Drug Class	Indication	Dosing	Side effects
Corticosteroids	May increase appetite, strength and promote a sense of well-being; effects last about 2-4 wks.	Initial dose : dexamethasone 4mg daily OR prednisolone 30mg daily in the morning. Prescribe for 1 week, if no benefit, stop. If helpful, increase or decrease to most effective dose; review regularly and withdraw if no longer improving symptoms. Other Considerations: Assess need for a proton pump inhibitor (i.e. pantoprazole, rabeprazole)	-peripheral edema; -candidiasis; -gastric irritation; -hyperglycaemia; -insomnia; -catabolic effect in reducing muscle mass and function.
Prokinetics	May be useful when chronic nausea occurs in association with cachexia because of autonomic failure with resulting gastroparesis.	metoclopramide 10 mg q4 to 8h. (higher doses can cause extrapyramidal symptoms) OR domperidone 10mg TID to QID (The risk of serious abnormal heart rhythms or cardiac arrest may be higher in patients taking domperidone at doses greater than 30mg a day or in patients who are more than 60 years).	- restlessness; - drowsiness; - extrapyramidal symptoms; - diarrhea; - weakness.
Synthetic Progestogens	May be useful in treating anorexia, improving appetite and increasing weight.	megestrol acetate: minimum efficacious dose = 160 mg daily and titrate to effect maximum dose = 480 mg/ day OR medroxyprogesterone acetate (MPA): 200 mg daily	-edema; -venous thromboembolic events; -hypertension

Selected References:

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4. Fearon K, Strasser F, Anker S, Bosaeus I, Bruera E, Fainsinger RL, Jatoi A, Loprinzi C, Macdonald N, Mantovani G, Davis M, Muscaritoli M, Ottery F, Radbruch P, Walsh D, Wilcock A, Kaasa S, & Baracos V. Definition and classification of cancer cachexia: an international consensus . *The Lancet*; 2011; 12: 489-495.

For full references, links to tools, and more information please refer to CCO's Symptom Management Guide-to-Practice: Loss of Appetite document (www.cancercare.on.ca/symptools).

Edmonton Symptom Assessment System (ESAS)

Alberta Health Services | Covenant Health

Edmonton Symptom Assessment System:
(revised version) (ESAS-R)

Please circle the number that best describes how you feel NOW:

No Pain	0	1	2	3	4	5	6	7	8	9	10	Worst Possible Pain
No Tiredness *(Tiredness = lack of energy)*	0	1	2	3	4	5	6	7	8	9	10	Worst Possible Tiredness
No Drowsiness *(Drowsiness = feeling sleepy)*	0	1	2	3	4	5	6	7	8	9	10	Worst Possible Drowsiness
No Nausea	0	1	2	3	4	5	6	7	8	9	10	Worst Possible Nausea
No Lack of Appetite	0	1	2	3	4	5	6	7	8	9	10	Worst Possible Lack of Appetite
No Shortness of Breath	0	1	2	3	4	5	6	7	8	9	10	Worst Possible Shortness of Breath
No Depression *(Depression = feeling sad)*	0	1	2	3	4	5	6	7	8	9	10	Worst Possible Depression
No Anxiety *(Anxiety = feeling nervous)*	0	1	2	3	4	5	6	7	8	9	10	Worst Possible Anxiety
Best Wellbeing *(Wellbeing = how you feel overall)*	0	1	2	3	4	5	6	7	8	9	10	Worst Possible Wellbeing
No _____ Other Problem *(for example constipation)*	0	1	2	3	4	5	6	7	8	9	10	Worst Possible _____

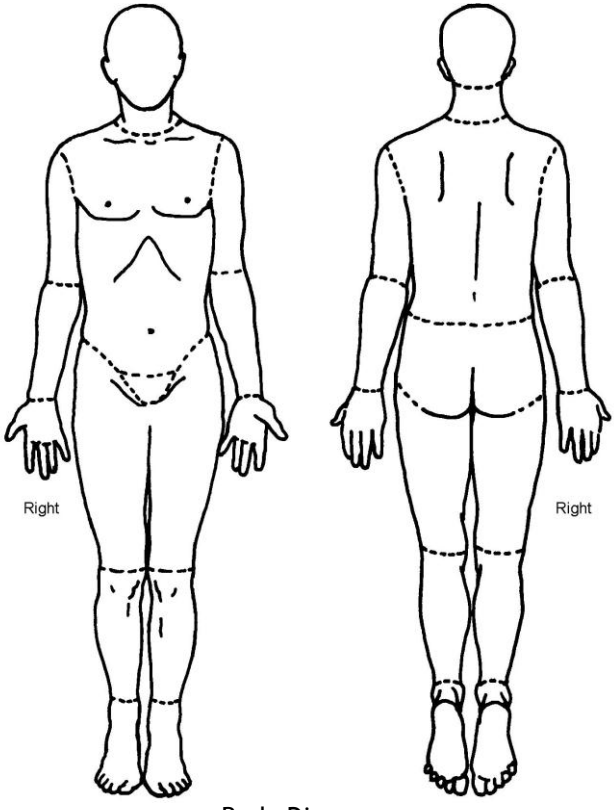
Patient's Name _____

Date _____ Time _____

Completed by (check one):
- ☐ Patient
- ☐ Family caregiver
- ☐ Health care professional caregiver
- ☐ Caregiver-assisted

BODY DIAGRAM ON REVERSE SIDE

Please mark on these pictures where it is you hurt.



Body Diagram

Disclaimer:

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