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### Nutritional Management: Head and Neck Cancer

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# Nutritional Management: Head and Neck Cancer Patients

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## Introduction

- Most head and neck cancer patients lose weight and are nutritionally compromised as a result of their disease, health behaviors, and treatment-related toxicities.
- Nutritional management is very important in head and neck cancer patients to improve outcomes and to minimize significant temporary or permanent treatment-related complications (eg., severe weight loss, dehydration, long-term morbidity).
- All head and neck cancer patients should have a pre-treatment assessment of speech and swallowing. A program of prophylactic exercises and the teaching of swallowing maneuvers can reduce impairments, maintain function and enable a speedier recovery.
- A registered dietician and a speech language/swallowing therapist should be a part of the multidisciplinary team for treating patients with head and neck cancer throughout the continuum of care.
- Problem** - Not all clinical practice guidelines/standards pertaining to nutritional management in head and neck cancers are stringently followed by the very healthcare professionals (physician, dietician, speech-language pathologist) designated to care for this population of patients. When quality of care is lacking means poorer outcomes for these patients.

## Complications During/After Chemotherapy and/or Radiation Therapy



- Oral Mucositis
- Pain
- Infection
- Bleeding
- Dry Mouth
- Tooth Decay
- Dehydration
- Taste Changes
- Fatigue
- Malnutrition
- Mouth and Jaw Stiffness
- Swallowing Problems
- Tissue and Bone Loss
- Radiodermatitis



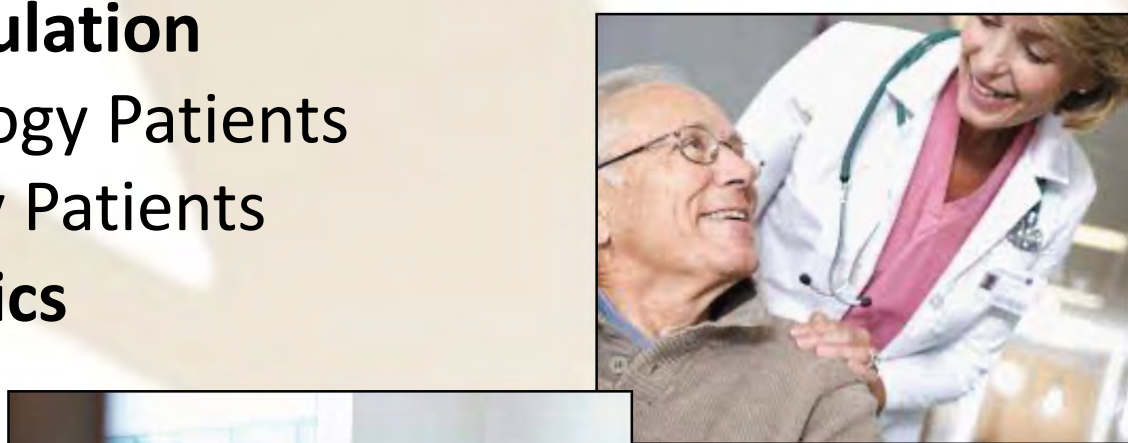
## Clinical Setting: Hematology/Oncology/ Radiation Oncology

### Patient Population

- Hematology Patients
- Oncology Patients

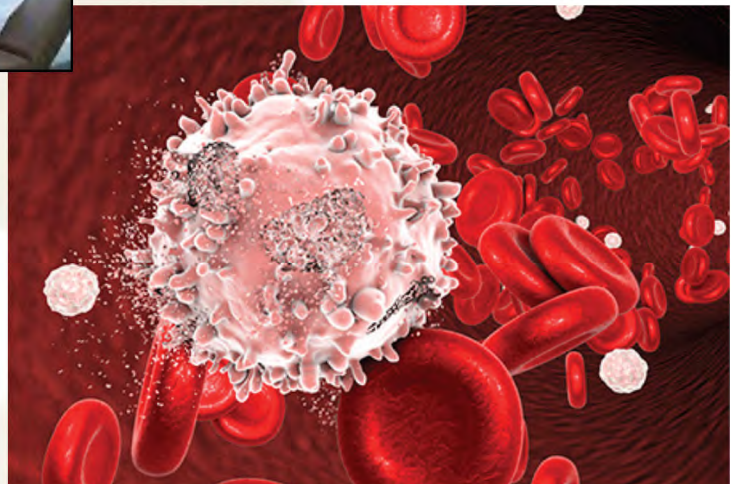
### Demographics

- Adults
- Elderly



### Hematologic Disorders

- Anemia
- Hemophilia
- Von Willebrand Disease
- Blood Clots
- Idiopathic Thrombocytopenic Purpura
- MGUS
- Low Blood Counts
- Polycythemia
- Lymphoma (Hodgkin's, Non-Hodgkin's)
- Leukemia (CLL, MCL)
- Multiple Myeloma
- Sickle Cell Disease



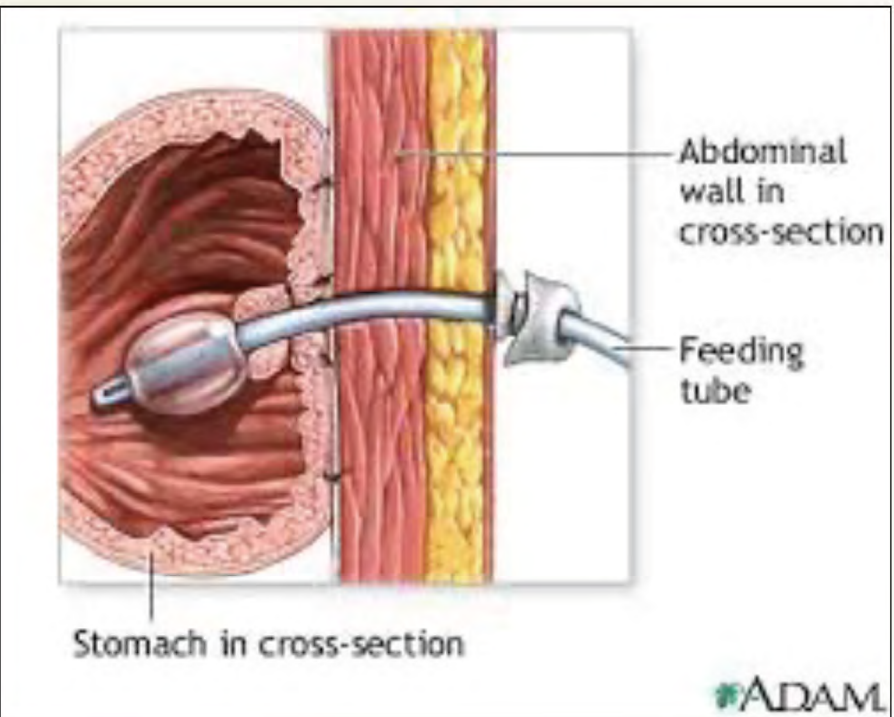
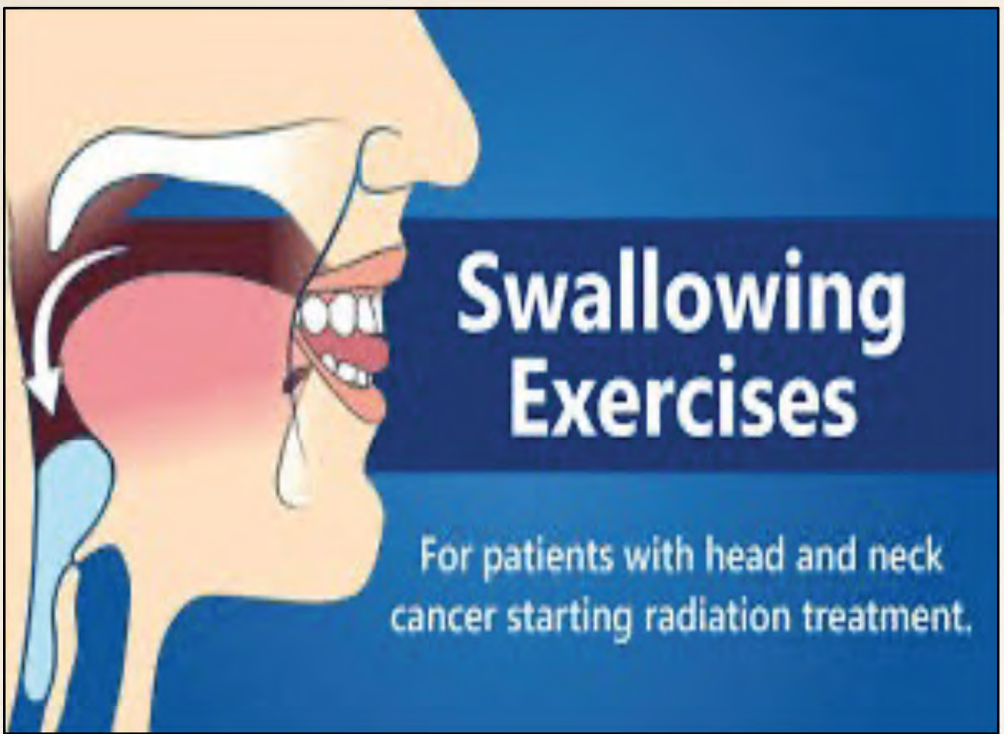
### Oncologic Disorders

- Bladder Cancer
- Breast Cancer
- Colon and Rectal Cancer
- Endometrial Cancer
- Head and Neck Cancer
- Kidney Cancer
- Liver Cancer
- Lung Cancer
- Pancreatic Cancer
- Prostate Cancer
- Skin Cancer (BCC, SCC, Melanoma)
- Thyroid Cancer

## Standards of Care

### Nutrition

- Close monitoring of nutritional status** is recommended in patients who have: 1) significant weight loss (5% weight loss over prior 1 month, or 10% weight loss over 6 months); and/or 2) difficulty swallowing because of pain or tumor involvement prior to treatment. **All patients should be evaluated for nutritional risks and should receive nutrition counseling by a registered dietician** and/or indicated treatment with various nutrition interventions (eg., reactive PEG tube).
- Pre- and post-treatment functional evaluation including nutritional status should be undertaken** using subjective and objective assessment tools. **All patients should receive dietary counseling with the initiation of treatment, especially with radiotherapy-based treatments. Regular follow-up with the registered dietician should continue at least until the patient has achieved a nutritionally stable baseline following treatment.** For some patients with chronic nutritional challenges, this follow-up should be ongoing.



### Speech and Swallowing

- A formal speech and swallowing evaluation at baseline is recommended** for either: 1) patients with speech and/or swallowing dysfunction; or 2) **patients whose treatment is likely to affect speech and/or swallowing.**
- Patients with ongoing abnormal function should be seen regularly by speech-language pathologists.** Dysphagia and swallowing function can be measured by clinical swallowing assessments or by videofluoroscopic swallowing studies. **Patient evaluations should also include assessment for any changes in speech and communication; changes in taste; and assessment of xerostomia, pain, and trismus. Follow-up with the speech-language pathologist should continue at least until the patient has achieved a stable baseline following treatment.** For some patients with chronic speech and swallowing challenges, this follow-up may need to be indefinite.

## Audit Tool Description

- Charts were chosen with focus on patients having a head and neck cancer diagnosis. A chart audit of 10 head and neck cancer patients was performed with use of an audit tool.
- Criteria chosen: RN weekly weight monitoring, RN/MD weekly pain assessment, initial pre-treatment dietician referral, dietary pre-treatment evaluation, regular dietary monitoring, dietary post-treatment evaluation, initial pre-treatment SLP referral, SLP formal evaluation, regular SLP monitoring, PEG tube placement.
- To assess the consistency and efficacy of use of evidence-based practice standards and quality of care delivered to head and neck cancer patients receiving chemotherapy and/or radiation therapy to improve outcomes and minimize temporary or permanent treatment-related complications (eg., severe weight loss, dehydration, long-term morbidity).

## Summary of Findings

- 10/10 patients received RN weekly weight monitoring = 100%
- 10/10 patients received RN/MD pain assessment = 100%
- 4/10 patients received initial pre-treatment dietician consult by Rad Onc MD = 40%
- 1/10 patients received dietary pre-treatment evaluation = 10%
- 0/10 patients received regular dietary monitoring = 0%
- 0/10 patients received dietary post-treatment evaluation = 0%
- 4/10 patients received initial pre-treatment SLP referral by Rad Onc MD = 40%
- 3/10 patients received SLP formal evaluation = 30%
- 0/10 patients received SLP regular monitoring = 0%
- 3/10 patients received prophylactic vs reactive PEG tube placement = 30%

	RN Weekly Weight Monitoring	RN/MD Weekly Pain Assessment	Initial Pre-Treatment Dietician Referral (Med Onc vs Rad Onc)	Dietary Pre-Treatment Evaluation	Regular Dietary Monitoring	Dietary Post-Treatment Evaluation	Initial Pre-Treatment SLP Referral (Med Onc vs Rad Onc)	SLP Formal Evaluation	Regular SLP Monitoring	PEG Tube Placement (Prophylactic vs Reactive)
Patient #1	X	X	Rad Onc	X			Rad Onc	X		Reactive
Patient #2	X	X	Rad Onc				Rad Onc	X		
Patient #3	X	X	Rad Onc				Rad Onc	X		Reactive
Patient #4	X	X								
Patient #5	X	X	Rad Onc				Rad Onc			
Patient #6	X	X								
Patient #7	X	X								
Patient #8	X	X								Reactive
Patient #9	X	X								



### Use of Alternative Routes for Nutrition (NG and PEG Tubes)

- The panel does not recommend prophylactic PEG or NG tube placement in patients with very good PS and without significant pretreatment weight loss, significant airway obstruction, or severe dysphagia.
- Prophylactic feeding tube placement should be strongly considered for patients with:**
  - Severe weight loss prior to treatment, 5% weight loss over prior 1 month, or 10% weight loss over 6 months;
  - Ongoing dehydration or dysphagia, anorexia, or pain interfering with the ability to eat/drink adequately;
  - Significant comorbidities that may be aggravated by poor tolerance of dehydration, lack of caloric intake, or difficulty swallowing necessary medications;
  - Severe aspiration; or mild aspiration in elderly patients or in patients who have compromised cardiopulmonary function; or patients for whom long-term swallowing disorders are likely, including those anticipated to receive large fields of high-dose radiation to the mucosa and adjacent connective tissues. However, consideration of other risk factors for swallowing dysfunction must be taken into account as well.
- For those who did not warrant prophylactic PEG or NG tube placement pre-treatment, **caloric intake, treatment related side effects, and change in body weight should be monitored by a registered dietician nutritionist (RDN) weekly during treatment. Consider reactive feeding tube placement if two or more of the following criteria apply:**
  - Inadequate food intake (60% of estimated energy expenditure) anticipated for more than 10 days.
  - Consider weight loss of 5% or more in 1 month.
  - Severe mucositis, odynophagia, dysphagia (Grade 3+) or aspiration.
- Consider age >60 years
  - To maintain swallowing function during and following treatment (eg., radiation), patients who may have feeding-tube placement should be encouraged to intake orally if they can swallow without aspiration or any other compromises. Alterations in swallowing function can occur long after treatment (especially after radiation-based treatment) and should be monitored for the lifetime of the patient.

### Pain

- Assess pain from oral mucositis and prescribe Gabapentin, Doxepin or Diphenhydramine/Lidocaine/Antacid mouthwash as clinically indicated.