Comprehensive Symptom Management in Head and Neck Cancer

Evidence-Based Strategies for the Multidisciplinary Care Team

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SESSION OBJECTIVES

What We Will Cover Today

01

Anatomy and Treatment Review

Review anatomical sites and treatment courses for head and neck cancers

02

Symptom Burden Across the Continuum

Apply pharmacologic and non-pharmacologic treatment strategies

03

Multidisciplinary Approach

Appreciate team-based frameworks for comprehensive symptom management

04

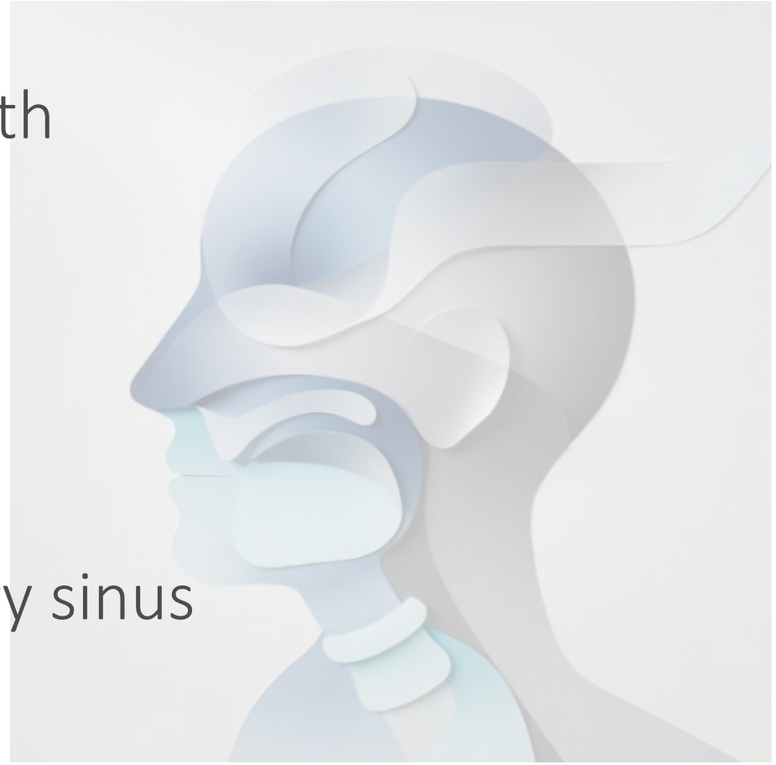
Psychosocial Impact

Discuss the psychosocial burden on patients and their caregivers

CHAPTER 1

Overview, Anatomy & Risk Factors

Nasopharyngeal
Oral cavity / mouth
Oropharynx
Hypopharynx
Glottic larynx
Salivary gland
Ethmoid/Maxillary sinus
Occult primary



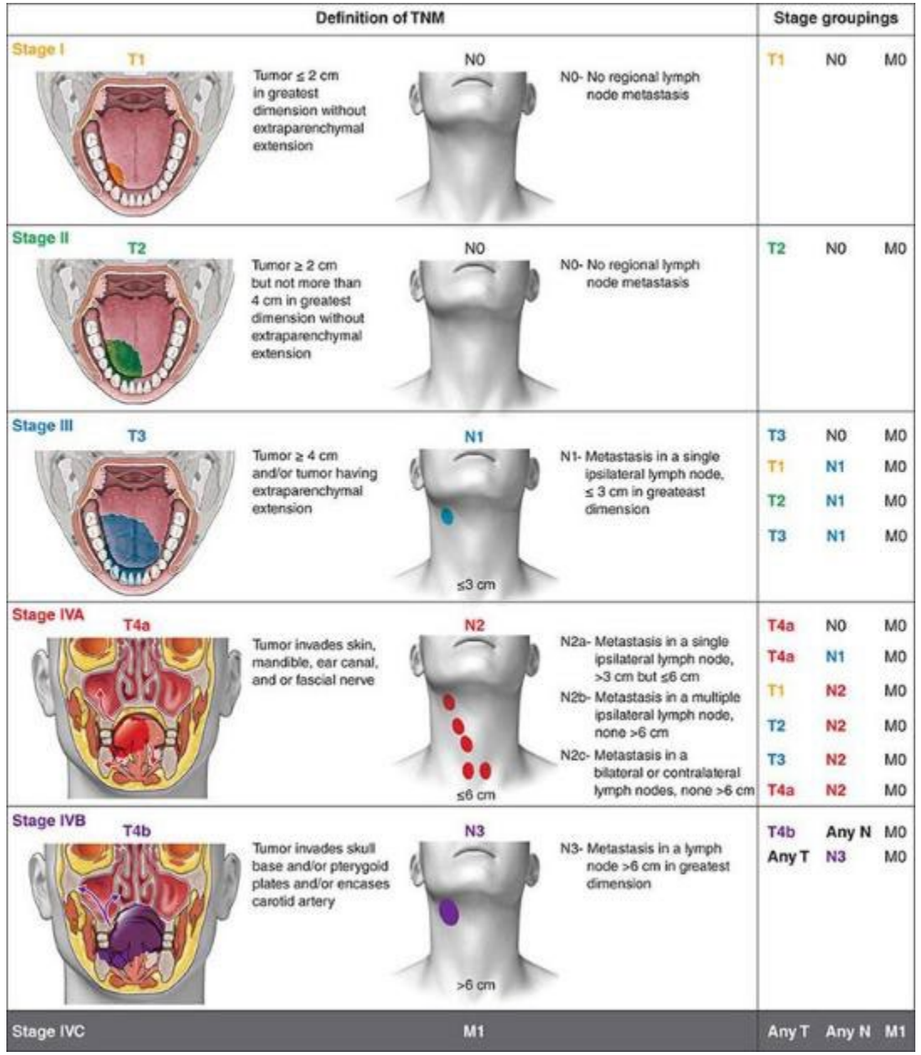
Risk Factors

- Alcohol and tobacco use (synergistic risk)
- UV and ionizing radiation exposure
- Occupational exposures (asbestos, wood dust)
- EBV — nasopharyngeal
- HPV: ~70% of oropharyngeal cancers
  - p16+, HPV+ correlates with improved prognosis
- Incidence ~2:1 male-to-female; most diagnoses over age 50

Head and neck cancers account for nearly 4% of all cancers in the United States per the NCI

Staging, Team Approach & Treatment Modalities

Surgery	Radiation	Chemotherapy
Resection of primary tumor ± nodal dissection	Definitive, adjuvant; 70 Gy standard over 7 weeks	Induction, concurrent, or adjuvant platinum-based



Active Treatment

6–7 weeks radiation ± concurrent chemotherapy

Acute Recovery

2 weeks post-treatment healing and toxicity management

VA Palliative Care Unit Cohort

Average stay 10 weeks — symptom burden often peaks post-treatment

NCCN Guidelines — Head and Neck Cancer (Version 1.2026)

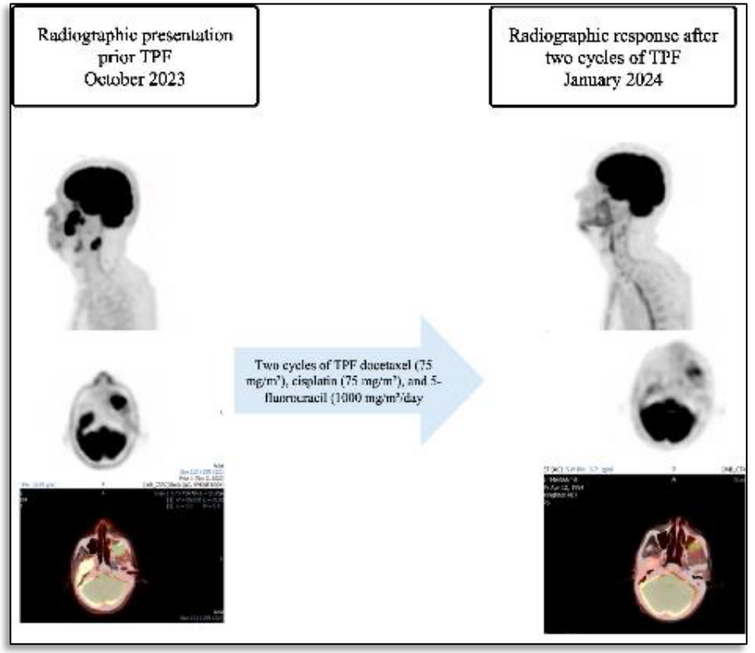
Treatment Protocols: Radiation, Chemotherapy & Algorithms

Chemotherapy Options and Terminology

Induction
TPF (docetaxel, cisplatin, 5-FU) or carboplatin-based; reduces tumor burden

Concurrent CRT
Cisplatin (q1w or q3w) or weekly carboplatin-paclitaxel; radiosensitizes tumor

Adjuvant
Targets residual micrometastatic disease post-definitive treatment



Pharmacogenomics testing is recommended prior to starting chemotherapy

Hesham A, et al. PMID: 38820886 · Seiwert TY, et al. PMID: 17259930

NCCN Head and Neck Guidelines — Version 1.2026

⚠ Concurrent chemoradiation significantly increases mucosal and systemic toxicity — primary driver of mucositis, xerostomia, and dysphagia.

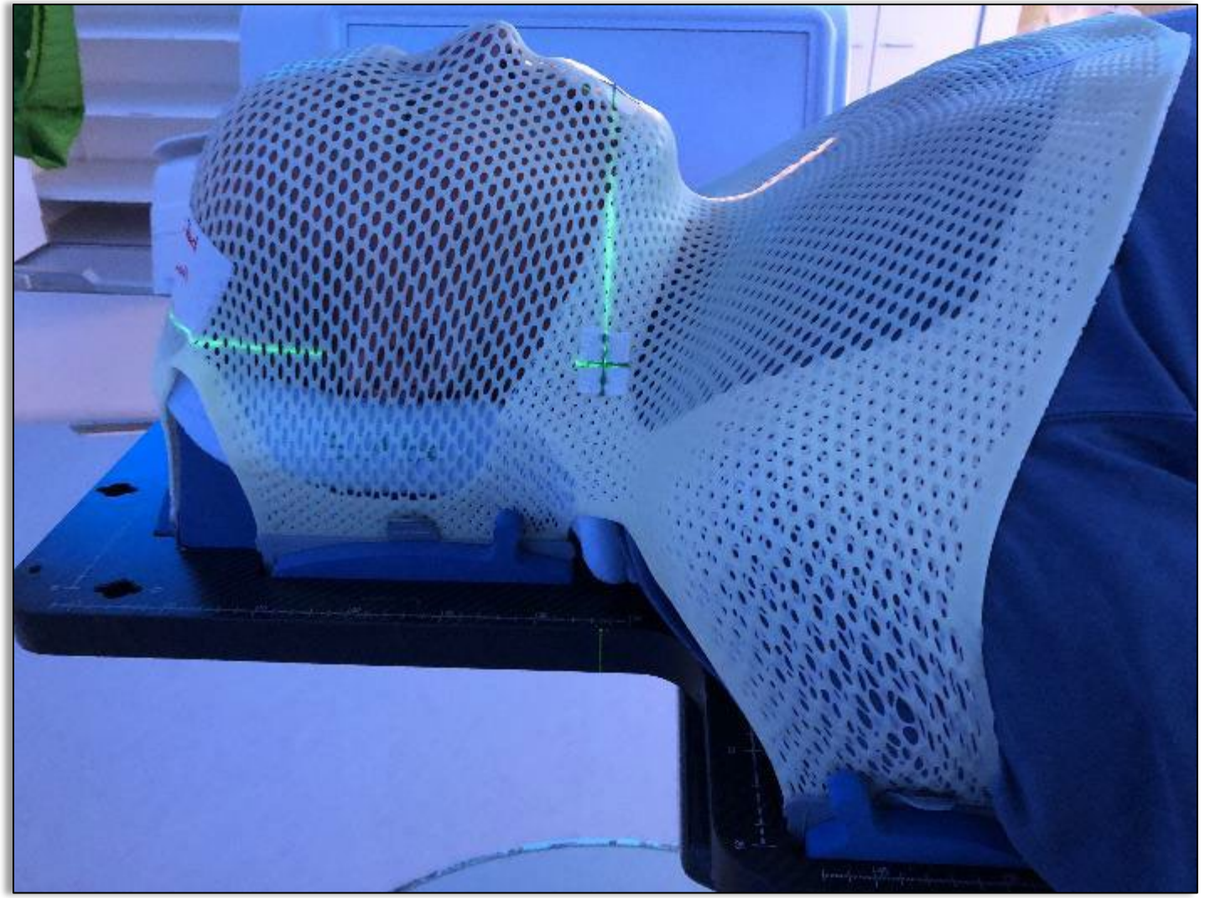
Radiation Treatment Logistics

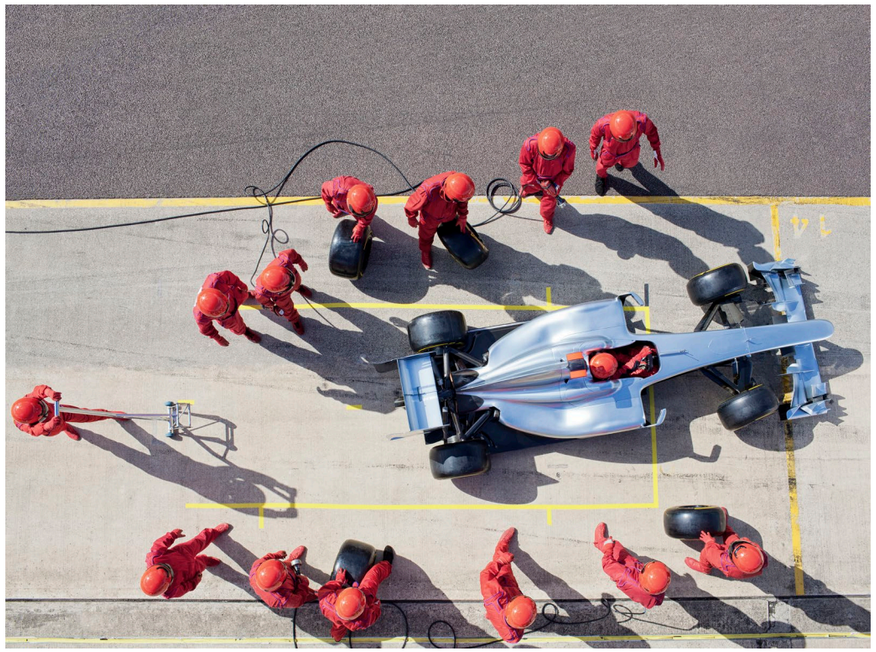
Daily Sessions

5 days/week for 6–7 weeks; ~35 total fractions

Immobilization

Custom thermoplastic mask fitted to each patient





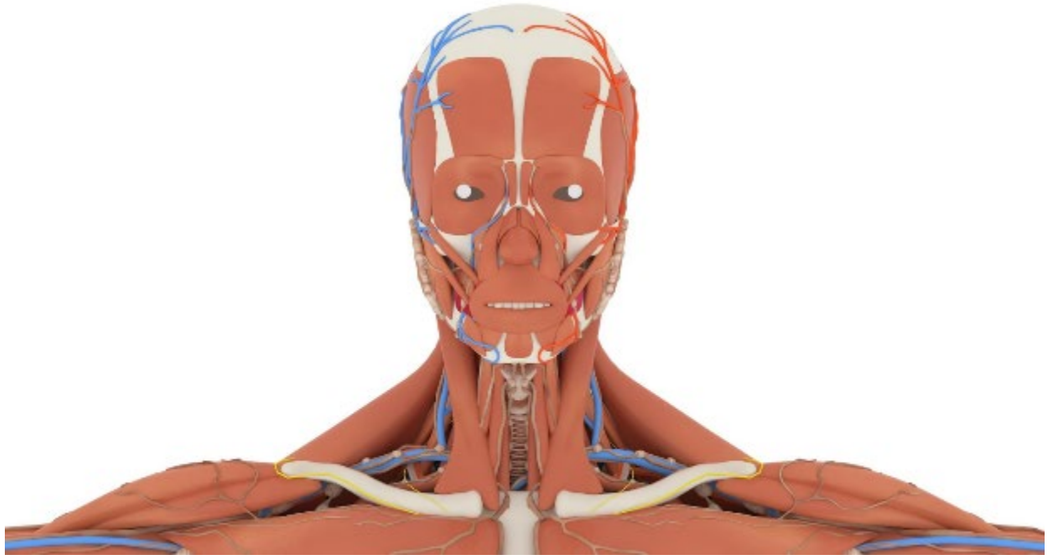
CHAPTER 2

Understanding Symptom Burden Across the Treatment Continuum

Head and neck cancer treatment produces one of the highest symptom burdens in oncology.

Proactive, evidence-based, and collaborative management is essential from diagnosis through survivorship.

Unique Challenges in Head and Neck Anatomy



Complex Anatomical Structures

The head and neck contain densely packed structures — mucosal surfaces, nerves, vessels, lymphatics, and glands — vital to multiple essential functions.

Vital Functions Affected

Swallowing, speech, breathing, taste, and salivation are all directly impacted by disease and treatment.

Symptom Overlap

Overlapping anatomical functions make isolating and managing individual symptoms particularly challenging.

Common Physical Symptoms and Toxicities

Mucositis

Dermatitis

Pain

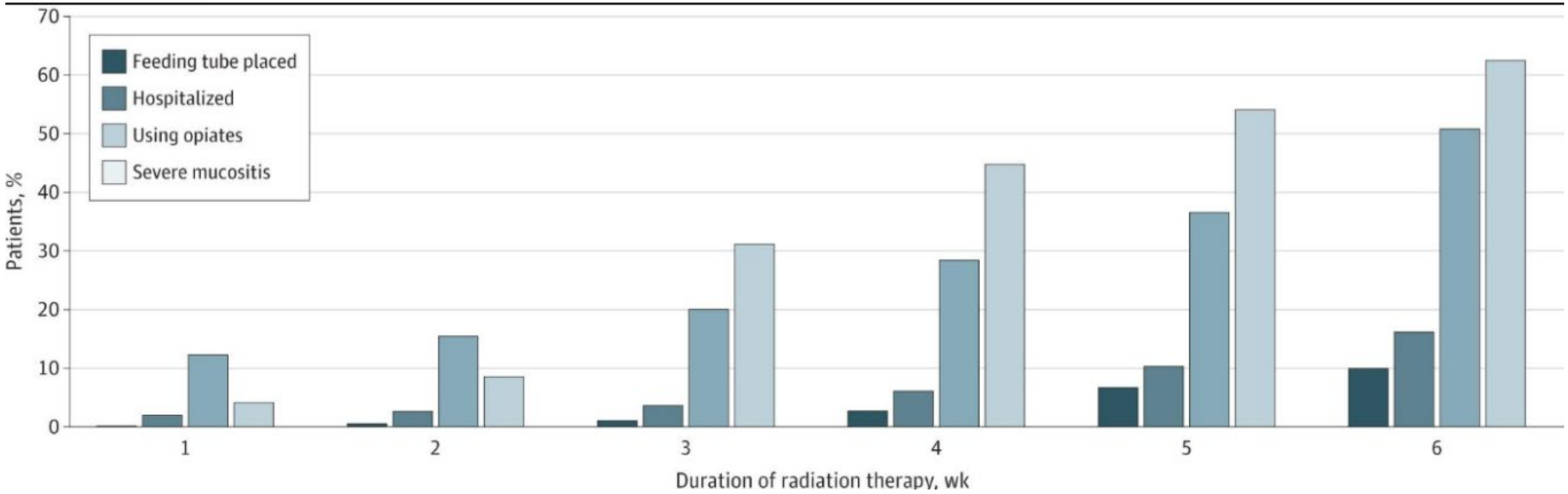
Xerostomia

Dysphagia

Fatigue & Anxiety

Timeline: toxicity peak

Mucositis and dermatitis typically peak at weeks 5–7



https://www.mypcnow.org/fast-fact/radiation-dermatitis/

Iovoli AJ, Turecki L, Qiu ML, et al. Severe Oral Mucositis After Intensity-Modulated Radiation Therapy for Head and Neck Cancer. *JAMA Netw Open.* 2023;6(10):e2337265

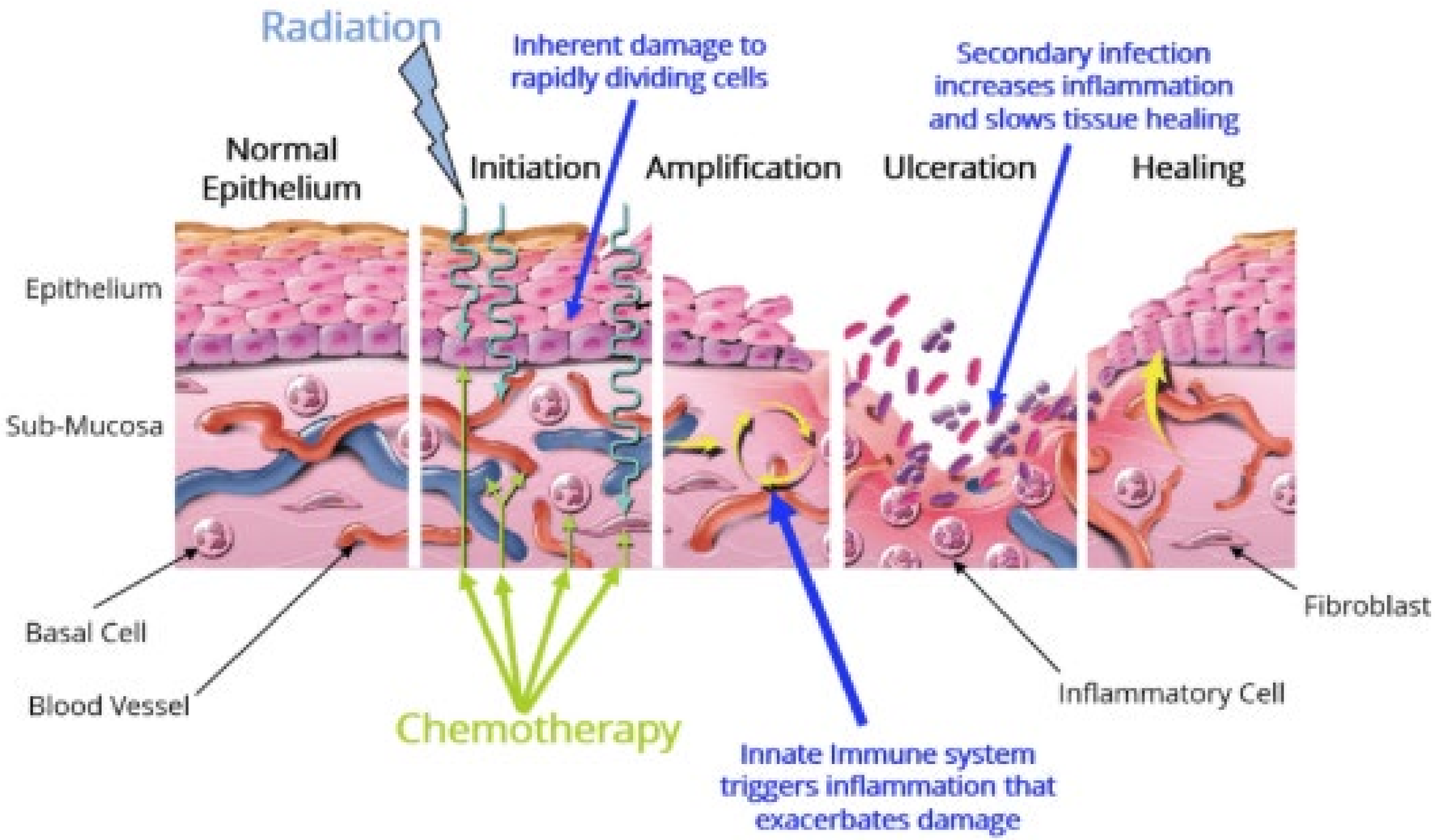
Symptom Progression Examples

4 days post-treatment

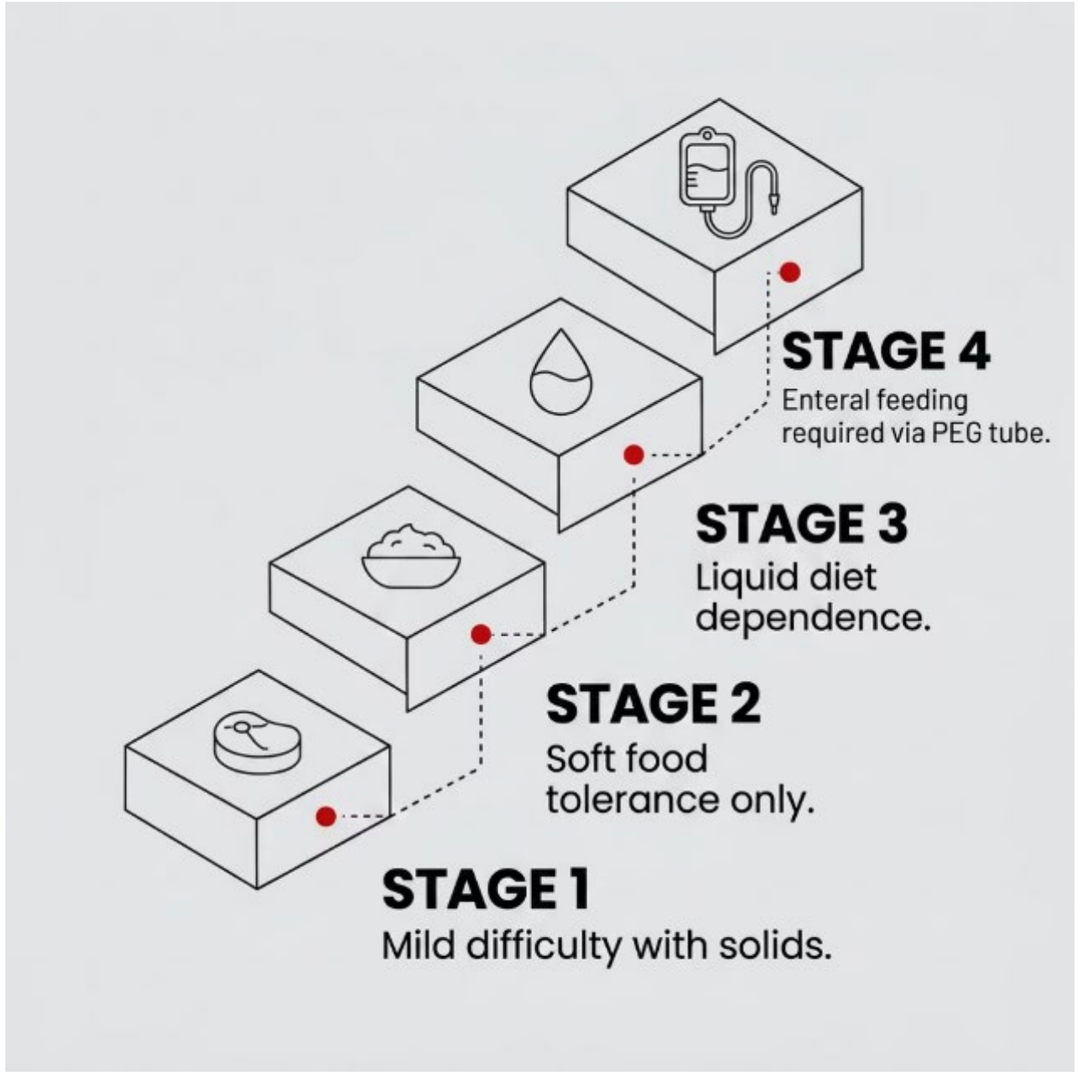
18 days post-treatment

Day 29 of treatment

Mucositis, Xerostomia, and Pain



Dysphagia and Nutrition Challenges



Dysphagia affects up to **90% of patients** receiving chemoradiation. Severity correlates with radiation dose to the pharyngeal constrictors and larynx.

- Proactive speech-language pathology referral
- Modified barium swallow study to assess aspiration risk
- Nutritional support: oral supplements, NG tube, or PEG
- Swallowing exercises during and after treatment

Aspiration risk increases substantially with cumulative radiation. Early SLP involvement is critical.

CHAPTER 3

Evidence-Based Pharmacologic and Non-Pharmacologic Interventions

Effective symptom requires a systematic, multimodal approach — integrating targeted medications with rehabilitative therapies, behavioral interventions, and supportive care strategies.

Targeted Pharmacologic Agents

Analgesics

Opioids, NSAIDs, and adjuvants (gabapentin) for mucositis and neuropathic pain

Mucosal Agents

Magic mouthwash formulations, sucralfate rinses to soothe ulcerated mucosa

Antimicrobials

Antifungals (fluconazole) for oral candidiasis; antivirals for HSV reactivation during immunosuppression

Salivary Substitutes

Artificial saliva sprays, and Biotene products for xerostomia management

Radiation Dermatitis

→ **Grades 1–2**

Erythema, dry desquamation;
managed with barrier creams and gentle cleansing

→ **Grade 3**

Moist desquamation; requires wound care, silver sulfadiazine, and possible treatment break

→ **Grade 4**

Full-thickness skin necrosis; rare but requires urgent multidisciplinary intervention

⚠ **Key principle:**
Prophylactic skin care initiated at treatment start reduces severity and improves patient comfort. Avoid topical products containing metal ions during active radiation.

https://www.mypcnow.org/fast-fact/radiation-dermatitis/

Barrier Creams (Aquaphor)

Form a protective occlusive layer, preventing moisture loss and reducing friction-related irritation during radiation.

Silver Sulfadiazine

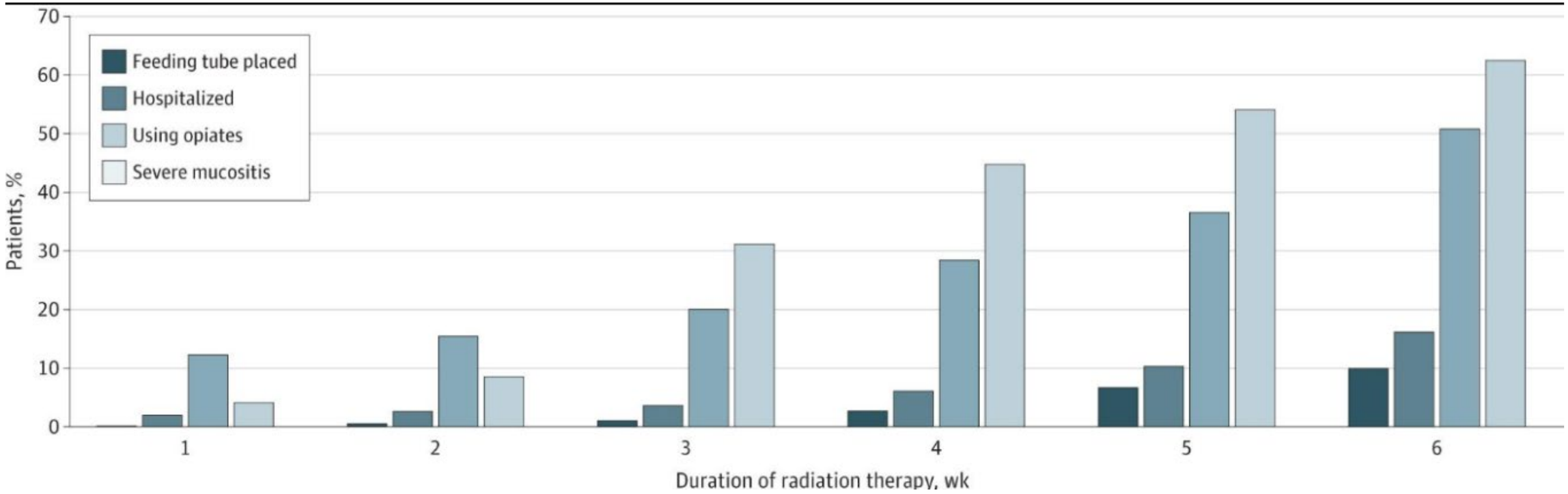
Antimicrobial agent for moist desquamation and open wounds; prevents secondary infection and supports healing.

Topical Corticosteroids

Reduce localized inflammation in reactive dermatitis; short-course use minimizes skin atrophy risk.

Timeline: toxicity peak

Mucositis and dermatitis typically peak at weeks 5–7



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Mucositis Treatment Modalities

Oral Care Protocols

Consistent oral hygiene (saline rinses, soft brush) reduces mucositis severity and promotes epithelial healing.

Salivary Substitutes

Artificial saliva, Biotene manage xerostomia and reduce secondary complications.

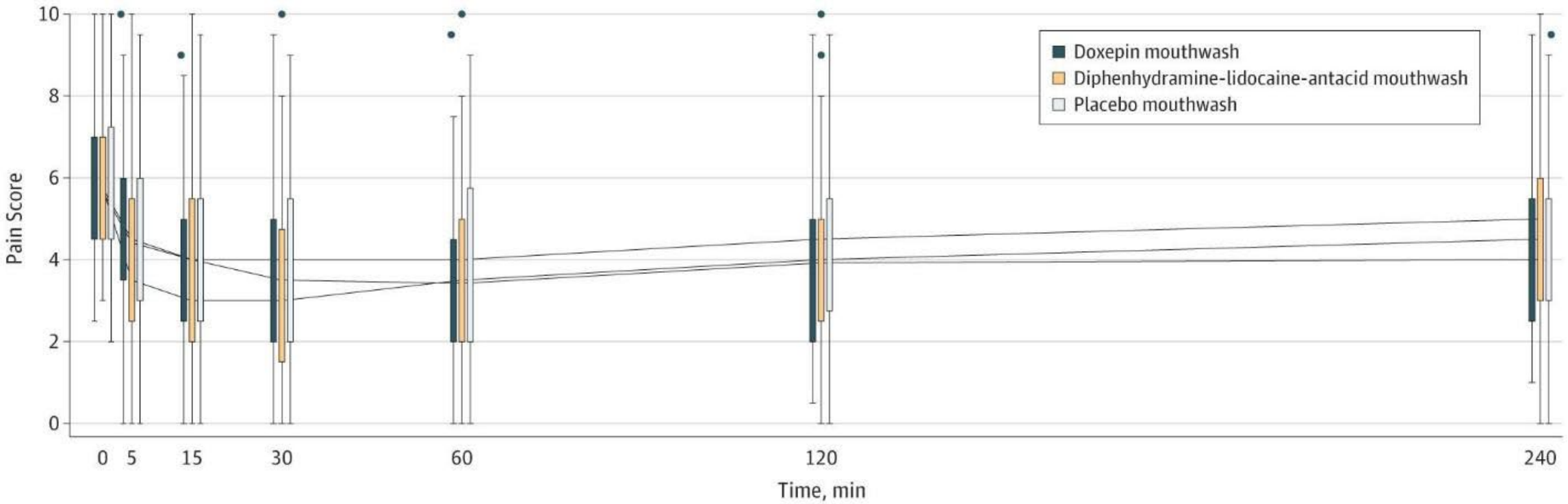
Analgesic Ladder

Opioids, adjuvants, and topical anesthetics; titrate proactively before pain becomes refractory.

Patient Education

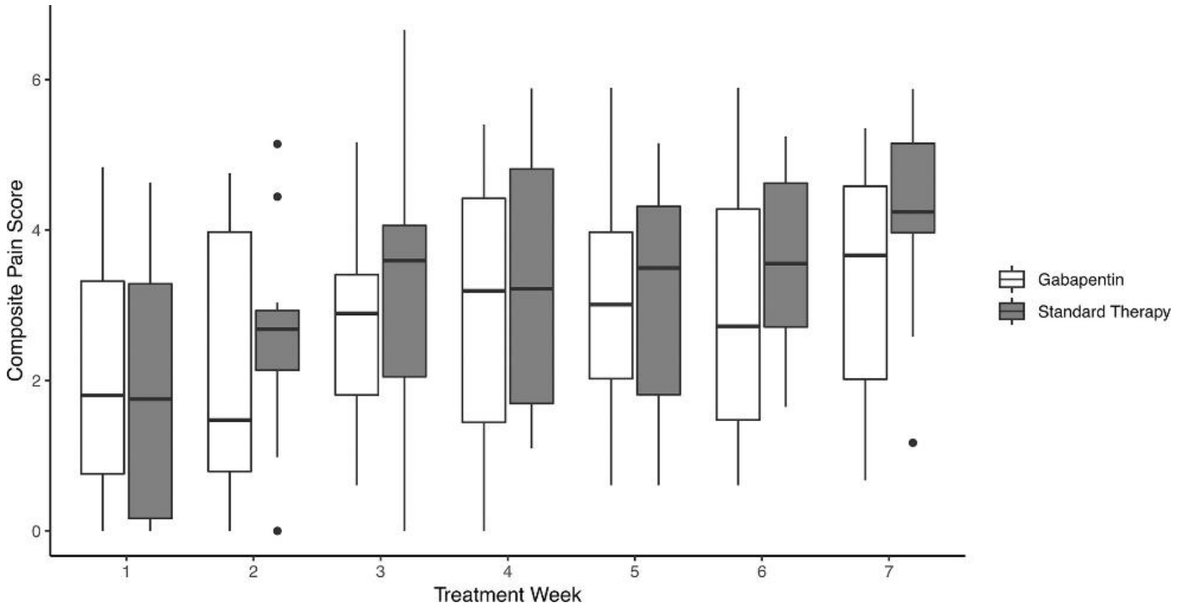
Empower patients to self-report early symptoms and adhere to prophylactic regimens.

Mucosal agents: Doxepin mouthwash, “DAL” solution, Sucralfate

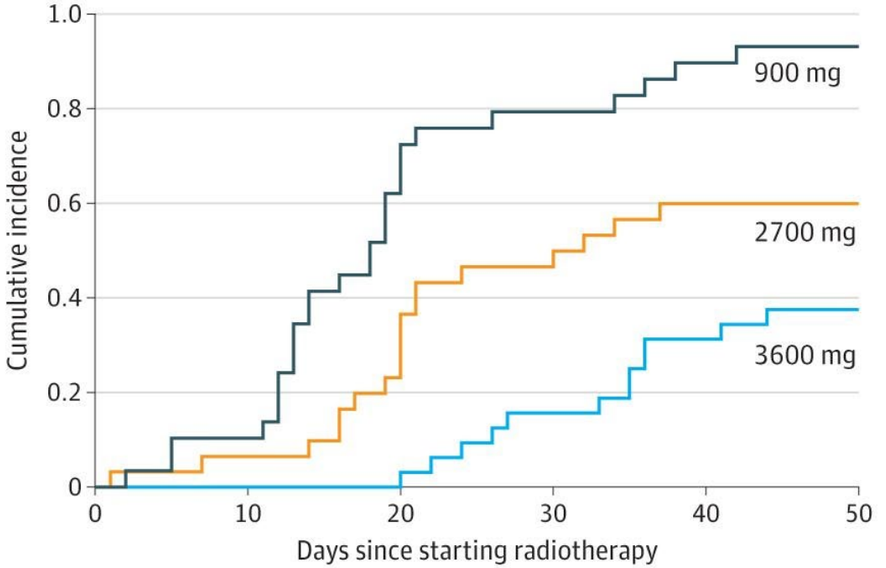


Sio et al. “Effect of Doxepin Mouthwash or Diphenhydramine-Lidocaine-Antacid Mouthwash vs Placebo on Radiotherapy-Related Oral Mucositis Pain: The Alliance A221304 Randomized Clinical Trial.” *JAMA.* April, 2019.

Neuropathic agents: gabapentin



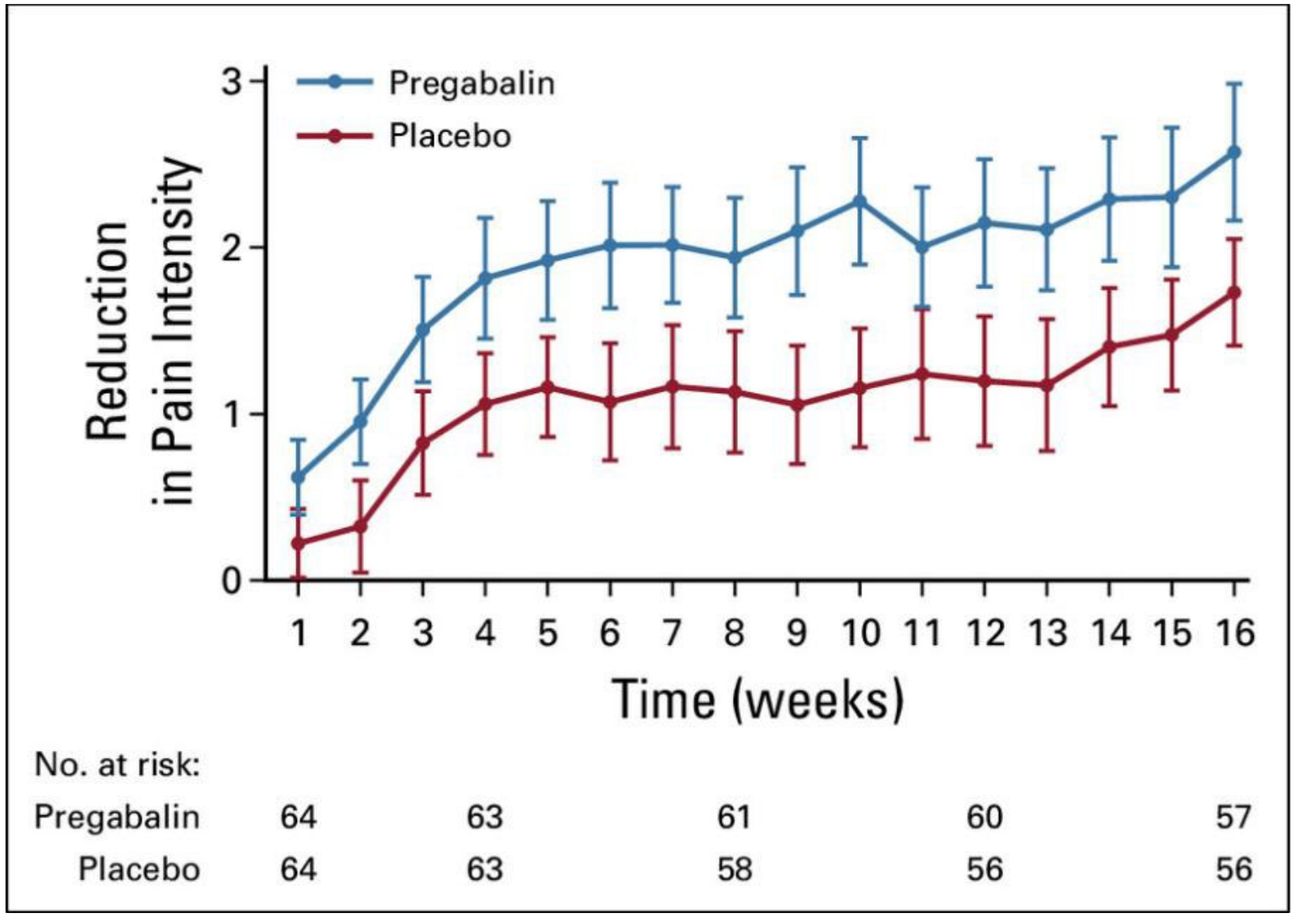
Smith et al. “Preventive use of gabapentin to decrease pain and systemic symptoms in patients with head and neck cancer undergoing chemoradiation.” *Head and Neck.* Aug, 2020.



No. without opioid use						
3600 mg	32	32	32	27	22	20
2700 mg	31	28	23	16	12	12
900 mg	29	26	11	6	3	2

Ma et al. “Association of Gabapentin Use With Pain Control and Feeding Tube Placement Among Patients With Head and Neck Cancer Receiving Chemoradiotherapy.” *JAMA Network.* May, 2022.

Neuropathic agents: pregabalin



Jiang et al. (*JCO* 2019): positive phase 3 RCT for late Radiotherapy-Related Neuropathic Pain (n=128)

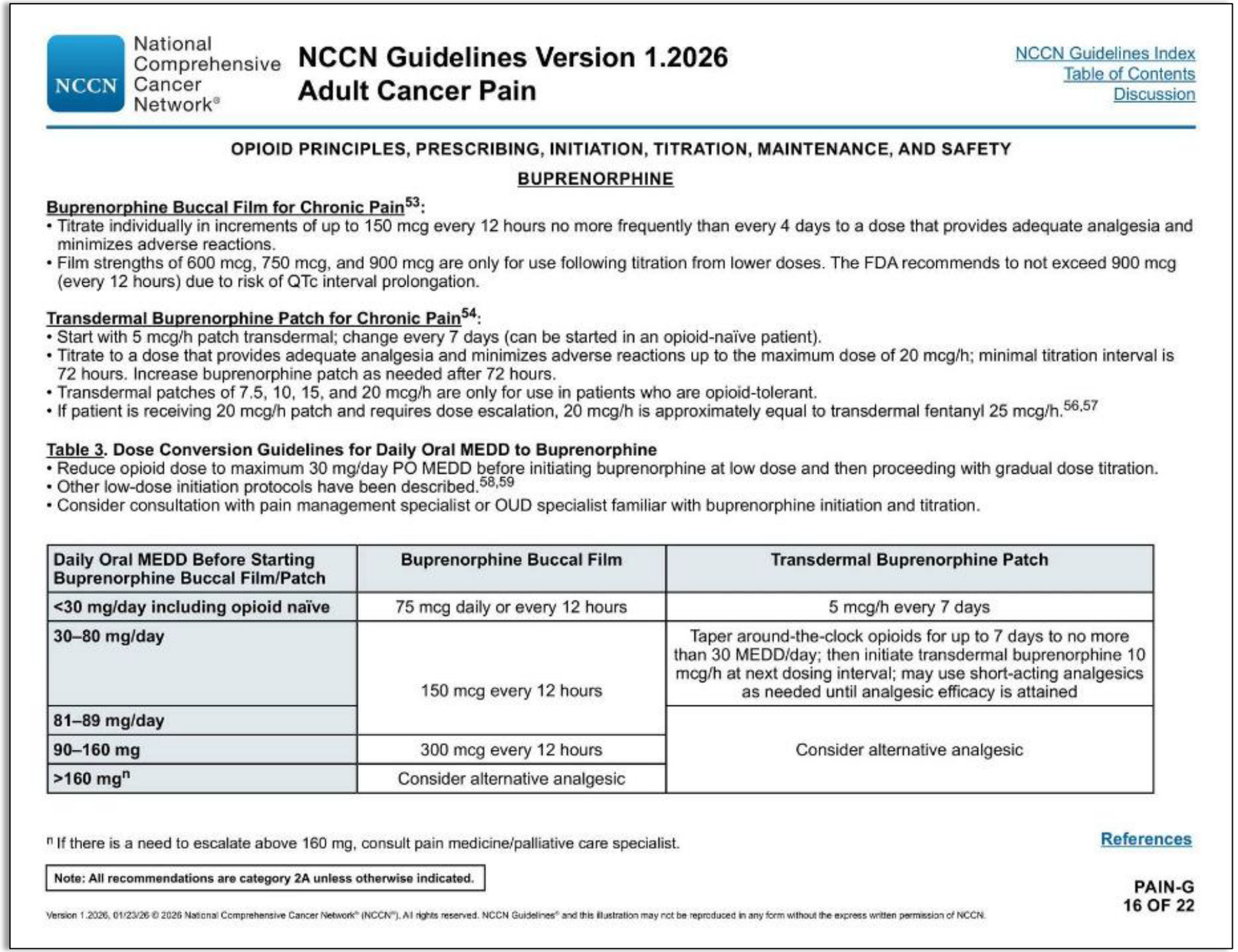
Opioids

Liquid morphine mouthwash

Oxycodone

Fentanyl patch

Buprenorphine



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NCCN Guidelines Version 1.2026
Adult Cancer Pain

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Discussion

OPIOID PRINCIPLES, PRESCRIBING, INITIATION, TITRATION, MAINTENANCE, AND SAFETY

BUPRENORPHINE

Buprenorphine Buccal Film for Chronic Pain[53]:
- Titrate individually in increments of up to 150 mcg every 12 hours no more frequently than every 4 days to a dose that provides adequate analgesia and minimizes adverse reactions.
- Film strengths of 600 mcg, 750 mcg, and 900 mcg are only for use following titration from lower doses. The FDA recommends to not exceed 900 mcg (every 12 hours) due to risk of QTc interval prolongation.

Transdermal Buprenorphine Patch for Chronic Pain[54]:
- Start with 5 mcg/h patch transdermal; change every 7 days (can be started in an opioid-naïve patient).
- Titrate to a dose that provides adequate analgesia and minimizes adverse reactions up to the maximum dose of 20 mcg/h; minimal titration interval is 72 hours. Increase buprenorphine patch as needed after 72 hours.
- Transdermal patches of 7.5, 10, 15, and 20 mcg/h are only for use in patients who are opioid-tolerant.
- If patient is receiving 20 mcg/h patch and requires dose escalation, 20 mcg/h is approximately equal to transdermal fentanyl 25 mcg/h.[56,57]

Table 3. Dose Conversion Guidelines for Daily Oral MEDD to Buprenorphine
- Reduce opioid dose to maximum 30 mg/day PO MEDD before initiating buprenorphine at low dose and then proceeding with gradual dose titration.
- Other low-dose initiation protocols have been described.[58,59]
- Consider consultation with pain management specialist or OUD specialist familiar with buprenorphine initiation and titration.

Daily Oral MEDD Before Starting Buprenorphine Buccal Film/Patch	Buprenorphine Buccal Film	Transdermal Buprenorphine Patch
<30 mg/day including opioid naïve	75 mcg daily or every 12 hours	5 mcg/h every 7 days
30–80 mg/day	150 mcg every 12 hours	Taper around-the-clock opioids for up to 7 days to no more than 30 MEDD/day; then initiate transdermal buprenorphine 10 mcg/h at next dosing interval; may use short-acting analgesics as needed until analgesic efficacy is attained
81–89 mg/day		Consider alternative analgesic
90–160 mg	300 mcg every 12 hours	
>160 mg[n]	Consider alternative analgesic	

[n] If there is a need to escalate above 160 mg, consult pain medicine/palliative care specialist.

References

Note: All recommendations are category 2A unless otherwise indicated.

The Interdisciplinary Team

Medical Oncology

Chemotherapy management, systemic toxicity monitoring

Radiation Oncology

Dose planning, radiation toxicity assessment

Palliative Care

Symptom management, goals of care, advance care planning

Speech-Language Pathology

Swallowing evaluation, rehabilitation, airway safety

Dietitian / Nutrition

Enteral nutrition support, weight and intake monitoring

Social Work & Psychiatry

Psychosocial assessment, coping support, resource coordination

CHAPTER 4

Psychosocial Impact on Patients and Caregivers

Head and Neck Cancer carries one of the highest psychosocial burdens in oncology. Visible anatomical changes, functional losses, and the social stigma of tobacco- or alcohol-related disease compound the emotional toll of diagnosis and treatment.

Coordination of Care and Patient Education

Integrated Communication

Structured handoffs, shared care plans, and regular multidisciplinary rounds ensure no symptom falls through the cracks.

Patient and Caregiver Education

Tailored education on expected toxicities, self-management strategies, and when to escalate empowers adherence and reduces emergency utilization.

Active Patient Participation

Engaged patients who understand their symptom trajectory demonstrate better treatment completion and functional outcomes.

Integration of Supportive and Palliative Care Services

Symptom Relief

Early palliative care integration — from diagnosis — provides systematic symptom monitoring and responsive management throughout the treatment course

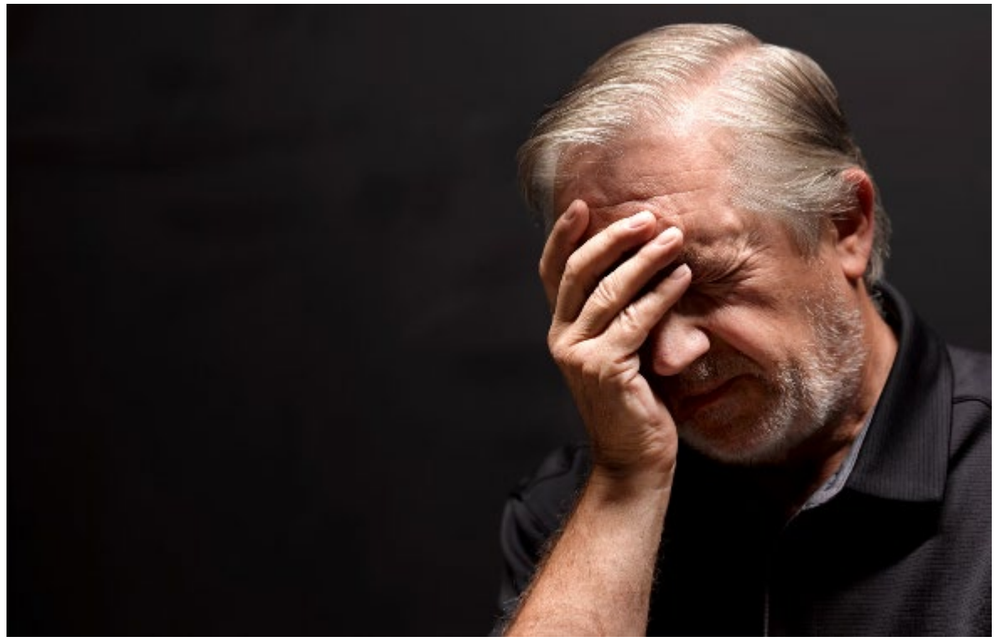
Psychosocial Support

Addressing emotional distress, caregiver burden, and existential concerns is a core palliative care competency, not an afterthought.

Quality of Life Enhancement

Concurrent palliative care has demonstrated improved QOL, reduced symptom burden, reduced treatment delays.

Psychosocial Impact: Key Domains



The experience of cancer is typically ongoing rather than a single event, and it may involve a series of challenges or stressors over time.

Depression & PTSD

Those who receive a depression diagnosis have poorer survival rates than those who do not.

Suicidality

3x higher risk of suicide compared to general public.

Body Image / Self-Confidence

Long term or chronic complications from the disease and/or treatment can lead to long effects on body image.

Interpersonal Relationships

Impaired facial expression and ability to communicate visible disfigurement, bad breath, sleep disturbance can impact intimacy.

Substance Dependence and Abuse

Continued smoking has been shown to worsen survival and leads to more frequent recurrence. Smoking/Alcohol use increased risk of wound healing.

Social Stigma

Functional challenges, drooling, facial disfigurement and lifestyle blame.

Smith JD, Shuman AG, Riba MB. Psychosocial Issues in Patients with Head and Neck Cancer: an Updated Review with a Focus on Clinical Interventions. *Curr Psychiatry Rep*. 2017;19(9):56. doi:10.1007/s11920-017-0811-9

Rieke K, Schmid KK, Lydiatt W, Houfek J, Boilesen E, Watanabe-Galloway S. Depression and survival in head and neck cancer patients. Oral Oncol. 2017;65:76-82. doi:10.1016/j.oraloncology.2016.12.014

Assessment Tools for Psychosocial Distress

Validated tools enable early identification of psychosocial distress in patients and caregivers, a prerequisite for timely, targeted intervention.

PHQ-9
Patient Health Questionnaire — screens for depression severity

GAD-7
Generalized Anxiety Disorder Scale — quantifies anxiety burden

ESAS
Edmonton Symptom Assessment System — broad symptom screening

C-SSRS
Columbia Suicide Severity Rating Scale — suicidality risk stratification

Timely Interventions for Psychosocial Needs

Early identification enables tailored, timely response. Interventions should be matched to the specific domain of distress identified.

Medications

Antidepressants, anxiolytics, and sleep agents — individualized to symptom profile

Mental Health Referral

Therapy, CBT, and support groups to address depression, PTSD, and adjustment disorders

Social Work

Community resource navigation, financial counseling, caregiver support

Chaplaincy

Emotional, spiritual, and existential support for patients and families

Conclusion: Key Takeaways

1 Treatment Complexity Demands Anticipatory Management

Treatment carries one of the highest toxicity burdens in oncology — proactive, evidence-based symptom care is essential from day one.

2 Multimodal Interventions Are the Standard

Effective management integrates pharmacologic, rehabilitative, nutritional, and psychosocial strategies across the care team.

3 Multidisciplinary Teams Improve Outcomes

Early and sustained collaboration among oncology, palliative care, SLP, nutrition, and mental health services optimizes patient function and quality of life.

4 Psychosocial Care Is Clinical Care

Screen early, intervene promptly, and integrate mental health support as a core — not ancillary — component of management.

Thank you!