

Studi innovativi sul controllo del dolore nella terapia di supporto alla disfagia dolorosa



 REGIONE PIEMONTE





Dolore e H&N

- L'importanza del **sintomo dolore** nelle diverse fasi del trattamento
- Focus sullo **stato dell'arte** nel trattamento del dolore durante le terapie
- **Studi innovativi** sul trattamento del dolore e **suggerimenti pratici**

Già in fase diagnostica....



PAIN® 152 (2011) 1206–1209

PAIN®

www.elsevier.com/locate/pain

Clinical note

Orofacial pain onset predicts transition to head and neck cancer

David K. Lam^a, Brian L. Schmidt^{b,c,*}

^aDepartment of Oral and Maxillofacial Surgery, University of California San Francisco, San Francisco, CA, USA

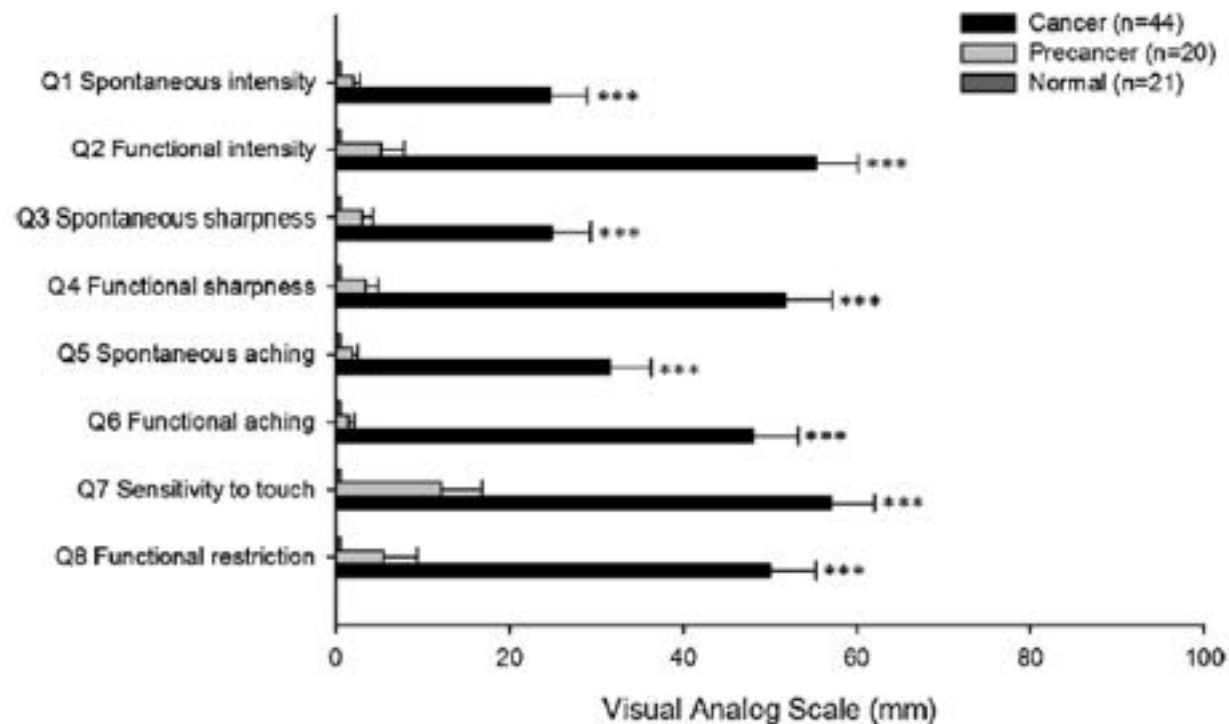
^bBluestone Center for Clinical Research, New York University, New York, NY, USA

^cDepartment of Oral and Maxillofacial Surgery, New York University, New York, NY, USA

Dal sintomo alla diagnosi?

Intensity of pain able to distinguish form precancerous lesions to oral cancer

D.K. Lam, B.L. Schmidt/PAIN® 152 (2011) 1206-1209



Fattore prognostico e predittivo



RESEARCH
EDUCATION
TREATMENT
ADVOCACY



The Journal of Pain, Vol 15, No 10 (October), 2014: pp 1015-1022
Available online at www.jpain.org and www.sciencedirect.com

Survival Patterns in Squamous Cell Carcinoma of the Head and Neck: Pain as an Independent Prognostic Factor for Survival

Cielito C. Reyes-Gibby,^{*} Karen O. Anderson,[†] Kelly W. Merriman,^{*} Knox H. Todd,^{*}

J Pain 2014

ORIGINAL ARTICLE

The Role of Pain in Head and Neck Cancer Recurrence and Survivorship

Joseph Scharpf, MD; Lucy Hynds Karnell, PhD; Alan J. Christensen, PhD; Gerry F. Funk, MD

Arch Otolaryngol Head Neck Surg 2009

Fattore prognostico e predittivo

BASALE

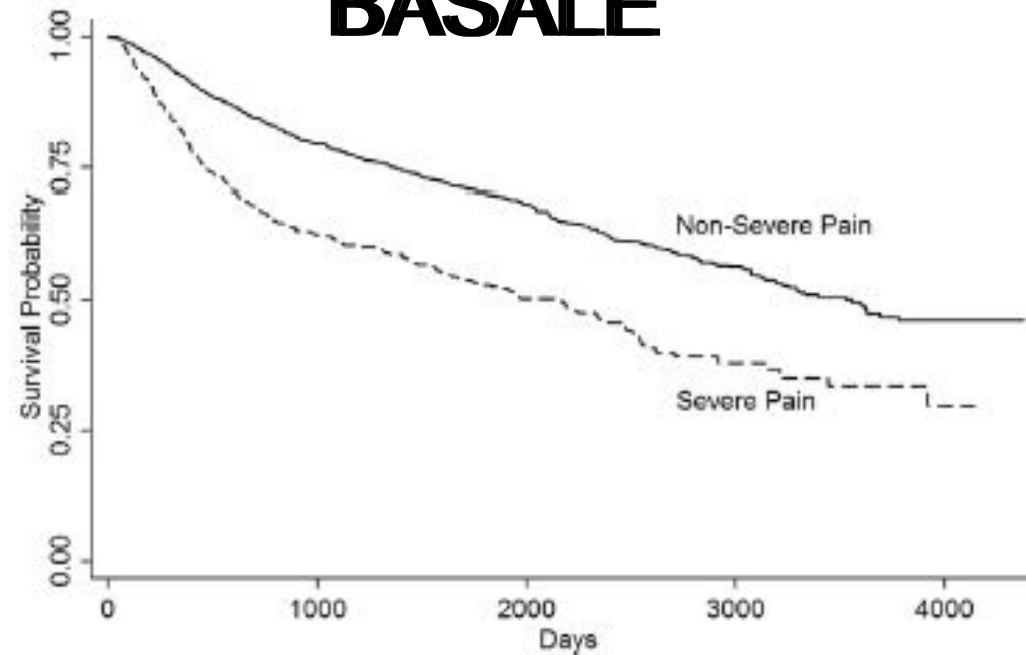


Figure 1. Kaplan-Meier estimates of the effect of pain on survival probability.

Fattore prognostico e predittivo?

POST TX

Table 4. Patient, Disease, and Treatment Characteristics That Predict Recurrence

Variable	No. of Patients ^a (n=191)	% of Patients Diagnosed as Having Recurrence	Multivariate Analysis (n=164)	
			P Value	Hazard Ratio
Posttreatment pain score			.003	3.758
No/low, 0-3	157	9.6		
Moderate/high, 4-10	34	26.5		
Age, y			NA	NA
<60	97	11.3		
60-69	49	14.3		
≥70	45	13.3		
Sex			NA	NA
Men	131	12.2		
Women	60	13.3		
"Combined" stage ^b			NA	NA
Early	75	12.0		
Advanced	104	13.5		
Tumor site			.03	1.968
Larynx	44	2.3		
Oral cavity	88	17.0		
Pharynx	41	17.1		
Treatment			NA	NA
Single modality	103	11.7		
Multimodality	86	14.0		

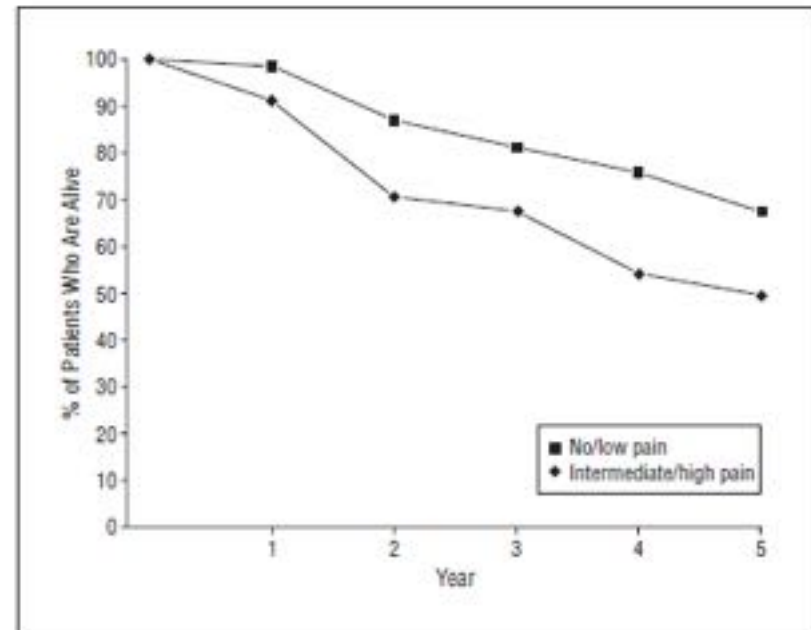
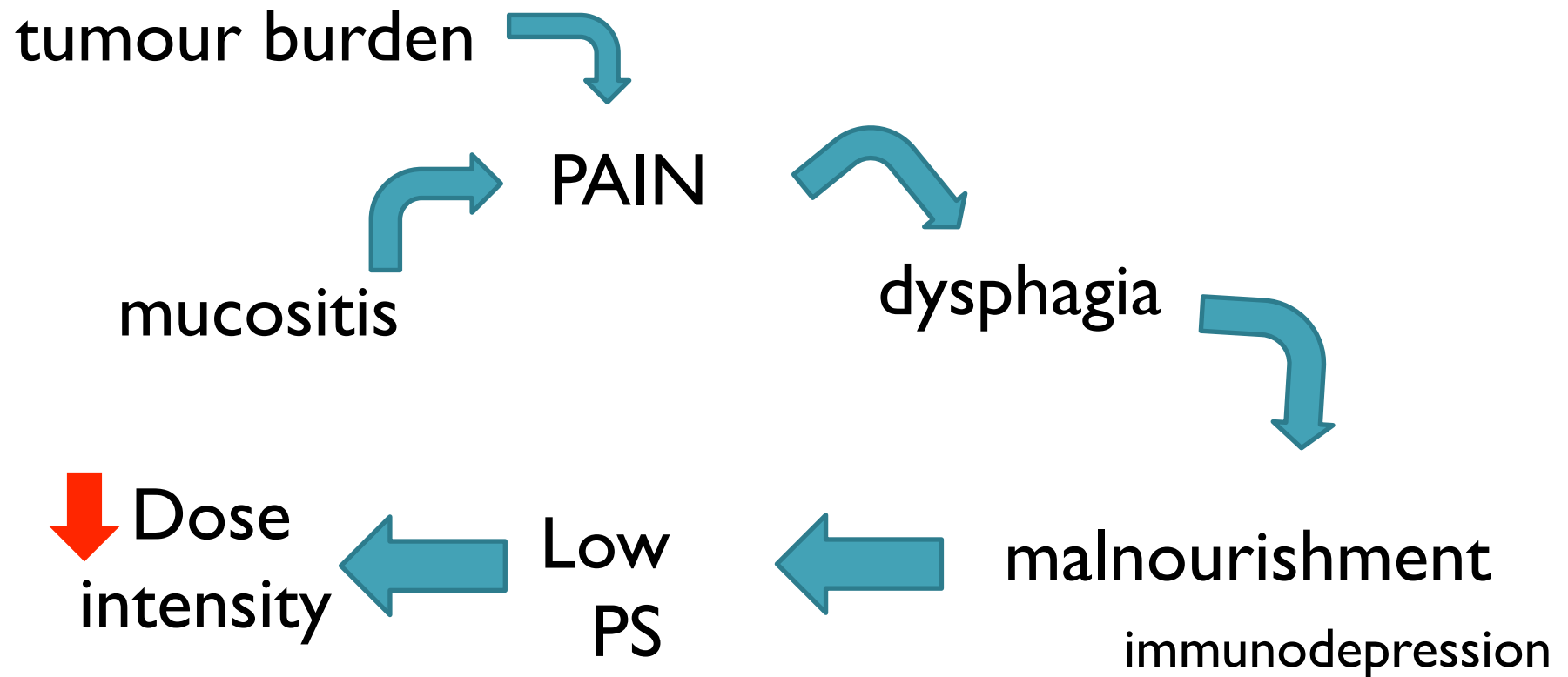


Figure. Five-year disease-specific survival rates by level of posttreatment pain among patients with head and neck cancer ($P=.04$). In year 1, 98.1% of patients with no/low pain (score range, 0-3) ($n=157$) survived, and 91.2% with intermediate/high pain (score range, 4-10) ($n=34$) survived; in year 2, 86.6% with no/low pain and 70.6% with intermediate/high pain survived; in year 3, 80.9% with no/low pain and 67.6% with intermediate/high pain survived; in year 4, 75.8% with no/low pain and 54.1% with intermediate/high pain survived; and in year 5, 67.4% with no/low pain and 49.4% with intermediate/high pain survived.

L'impatto del dolore durante il trattamento



L'impatto del dolore durante il trattamento



Pluralità di cause... non solo da malattia!

review

Annals of Oncology 00: 1–10, 2014
doi:10.1093/annonc/mdu011

Pain related to cancer treatments and diagnostic procedures: a no man's land?

C. I. Ripamonti^{1*}, P. Bossi², D. Santini³ & M. Fallon⁴

¹Supportive Care in Cancer Unit, Fondazione IRCCS, Istituto Nazionale dei Tumori, Milan; ²Head and Neck Medical Oncology Unit, Fondazione IRCCS, Istituto Nazionale dei Tumori, Milan; ³Medical Oncology Unit, Università Campus Bio-Medico, Rome, Italy; ⁴St Columba's Hospice Chair of Palliative Medicine, IGMM, University of Edinburgh, Edinburgh, UK



Focus sullo stato dell'arte del trattamento del dolore

An abstract background for the conference poster. It features a central DNA double helix structure that appears to be composed of many small, colorful spheres (yellow, blue, brown, white) arranged in a spiral pattern. The background is a light blue gradient. The overall effect is scientific and dynamic.

Consensus conference
on supportive care in concurrent chemo-radiation
treatment of head and neck cancers

MILAN, MAY 5 2014

Fondazione IRCCS Istituto Nazionale dei Tumori

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Istituto Nazionale dei Tumori

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and
LILT - EORTC

TOPICS

MUCOSITIS

DYSPHAGIA

HEMATOLOGICAL TOXICITY

INFECTIONS

NUTRITION/HYDRATION

PAIN

SKIN TOXICITY

STOMATOLOGICAL PROBLEMS

Consensus conference on supportive care
in concurrent chemo-radiation of head and neck cancers



DURING TREATMENT

Increasing evidence supports the importance of **continued swallowing effort** during and after the course of radiation in order to minimize disuse atrophy and fibrosis and to optimize long term swallow function.

Adequate pain control may substantially enhance swallow effort.

Consensus conference on supportive care
in concurrent chemo-radiation of head and neck cancers



DURING TREATMENT

Treatment of painful mucositis may benefit from **topical and systemic drugs.**

However, the **use of an opioid-based systemic pain control program is almost always necessary for pain relief.**

**Consensus conference on supportive care
in concurrent chemo-radiation of head and neck cancers**



DURING TREATMENT TOPICAL AGENTS

Topical anaesthetics (e.g. Lidocaine 2%) alone or as mixture mouthwashes may be **effective but with a short duration** of effect (15-30 min).

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in concurrent chemo-radiation of head and neck cancers



**DURING TREATMENT
TOPICAL AGENTS**

**Topical morphine is effective
for relieving pain
and it is probably more effective
than topical lidocaine**

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in concurrent chemo-radiation of head and neck cancers**



DURING TREATMENT TOPICAL AGENTS



Pain 105 (2003) 265–273

PAIN

www.elsevier.com/locate/pain

Potential utility of the peripheral analgesic properties of morphine in stomatitis-related pain: a pilot study

Leandro C.A. Cerchietti^{a,b,*}, Alfredo H. Navigante^{a,b}, Miguel W. Körte^c, Alejandro M. Cohen^d,
Patricia N. Quiroga^d, Edda C. Villaamil^d, Marcelo R. Bonomi^{b,e}, Berta M. Roth^{a,e}

**Consensus conference on supportive care
in concurrent chemo-radiation of head and neck cancers**



DURING TREATMENT TOPICAL AGENTS

Effect of Topical Morphine for Mucositis-Associated Pain following Concomitant Chemoradiotherapy for Head and Neck Carcinoma

Leandro C. A. Cerchletti, M.D.¹
Alfredo H. Navigante, M.D., Ph.D.¹
Marcelo R. Bonomi, M.D.²
Mariel A. Zaderajko, M.D.²
Pablo R. Menéndez, M.D.²
Catalina E. Pogany, M.D.²
Berta M. C. Roth, M.D.²

TABLE 2
Primary End Points after the Treatment

End points	Group MO (n = 14)	Group MG (n = 12)	P value ^a
Duration of severe functional impairment (days mean \pm SD)	1.85 \pm 1.53	7.67 \pm 4.3	0.017
Duration of severe pain (days mean \pm SD)	5.07 \pm 1.79	8.58 \pm 2.65	0.032
M3H-NRS (1st-3rd quartile)	6 (5-6.75)	7.5 (6.16-8.83)	0.038

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in concurrent chemo-radiation of head and neck cancers



DURING TREATMENT TOPICAL AGENTS

Topical fentanyl prepared as lozenges is **not effective** and its use should be avoided.

Topical capsaicin may desensitize pts prior to the onset of mucositis but it is poorly tolerated and **has no place** in clinical practice.

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in concurrent chemo-radiation of head and neck cancers



**DURING TREATMENT
SYSTEMIC DRUGS**

Patients often experience difficulty with swallowing during and after surgery or radiation-based treatments.

Under these circumstances, **transdermal fentanyl can provide consistent and effective pain relief.**

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in concurrent chemo-radiation of head and neck cancers**



**DURING TREATMENT
SYSTEMIC DRUGS**

**An effective pain regimen should
include a
fixed and breakthrough medication
with an appropriate dose and schedule
for each.**

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in concurrent chemo-radiation of head and neck cancers**



**DURING TREATMENT
SYSTEMIC DRUGS**

Odynophagia should be considered **breakthrough pain** to be treated with appropriate breakthrough medication dosing.

**Consensus conference on supportive care
in concurrent chemo-radiation of head and neck cancers**



DURING TREATMENT SYSTEMIC DRUGS

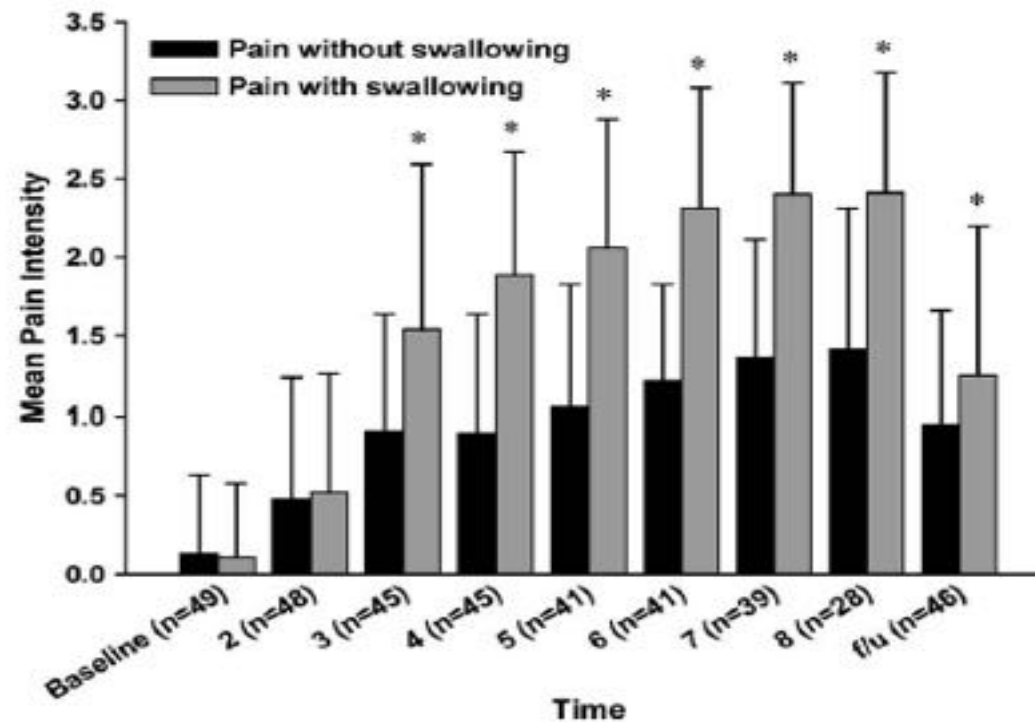


Fig. 2. Average weekly pain ratings using the MacDibbs Mouth Assessment Tool with patients swallowing and not swallowing on a 0–3 scale. Significant differences (*) were found from Week 3 to follow-up ($P=0.001$). F/U = follow-up. Values are plotted as means \pm SD.

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in concurrent chemo-radiation of head and neck cancers**



**DURING TREATMENT
SYSTEMIC DRUGS**

Preventive administrations of breakthrough pain medication a half hour before eating may improve swallow function.

Transmucosal intranasal route administration of fentanyl is a rationale approach to odynophagia treatment.

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in concurrent chemo-radiation of head and neck cancers**



Gabapentin for the Treatment of Pain Syndrome Related to Radiation-Induced Mucositis in Patients With Head and Neck Cancer Treated With Concurrent Chemoradiotherapy

Cancer 2010

Voichita Bar Ad, MD¹; Gregory Weinstein, MD²; Pinaki R. Dutta, MD, PhD¹; Arie Dosoretz³; Ara Chalian, MD²; Stefan Both, PhD¹; and Harry Quon, MD¹

**DURING TREATMENT
SYSTEMIC DRUGS**

**Mucositis is frequently associated with a
neuropathic pain.**

Even if high doses of gabapentin have been reported to reduce the need for high total dose of opioids, neuropathic pain control remains a critical item with very frequent failures.

**Consensus conference on supportive care
in concurrent chemo-radiation of head and neck cancers**



Head & Neck Oncology

Open Access

Research

Neuropathic and nociceptive pain in head and neck cancer patients receiving radiation therapy

Joel B Epstein^{†1,3,4}, Diana J Wilkie^{*†1,2}, Dena J Fischer^{†3}, Young-Ok Kim^{†2}
and Dana Villines^{†3}

Address: ¹University of Illinois Cancer Center, University of Illinois, Chicago, USA, ²University of Illinois College of Nursing, University of Illinois, Chicago, USA, ³University of Illinois College of Dentistry, University of Illinois, Chicago, USA and ⁴University of Illinois College of Medicine, University of Illinois, Chicago, USA

Email: Joel B Epstein - jepstein@uic.edu; Diana J Wilkie* - diwilkie@uic.edu; Dena J Fischer - fischerd@uic.edu; Young-Ok Kim - ykim2@uic.edu; Dana Villines - dvilli1@uic.edu

* Corresponding author †Equal contributors

DURING TREATMENT SYSTEMIC DRUGS

Patients with **musculoskeletal pain** may benefit from adjunctive medications such as **non-steroidal inflammatory** (systemic and topical) and **anti-spasmodics**.

Consensus conference on supportive care
in concurrent chemo-radiation of head and neck cancers



**DURING TREATMENT
AFTER TREATMENT**

Patients with jaw, neck and shoulder dysfunction related to tumor or treatment induced lymphedema and fibrosis may experience acute and long term musculoskeletal pain.

**Consensus conference on supportive care
in concurrent chemo-radiation of head and neck cancers**



Studi innovativi: ...ne abbiamo la necessità?

JOURNAL OF ORAL & MAXILLOFACIAL RESEARCH

Trotter et al.

Pharmacological and Other Interventions for Head and Neck Cancer Pain: a Systematic Review

Patrick B. Trotter¹, Lindsey A. Norton¹, Ann S. Loo¹, Jonathan I. Munn¹, Elena Voge^{1,2}, Kim W. Ah-See³, Tatiana V. Macfarlane¹

“Randomized trial” “head and neck” “pain” 1947+:

13 studies included

“There is insufficient evidence from RCT of HN cancer pain to advise on an optimal intervention”



Trattamento del ...dolore da trattamento!

Individualized pharmacological treatment of oral mucositis pain in patients with head and neck cancer receiving radiotherapy

Ingrid Stenstrom Ling • Britt Larsson

Supp Care Cancer 2011

“...individualized pain treatment with systemic analgesics exploited to the highest degree **was insufficient**. Future development of pharmacological possibilities for treatment of OM-related pain is urgent.”

Original Article

Mucositis Pain Induced by Radiation
Therapy: Prevalence, Severity, and Use
of Self-Care Behaviors

Piera C. Wong, RN, MS, Marilyn J. Dodd, RN, PhD, FAAN,

J Pain Sympt management 2006

“.... Pain from radiation therapy (RT)-induced mucositis is a **significant clinical problem** for patients with head and neck cancer (HNC)...
...However, **more severe pain with swallowing** was not managed well throughout the study.”

Andamento temporale in RT

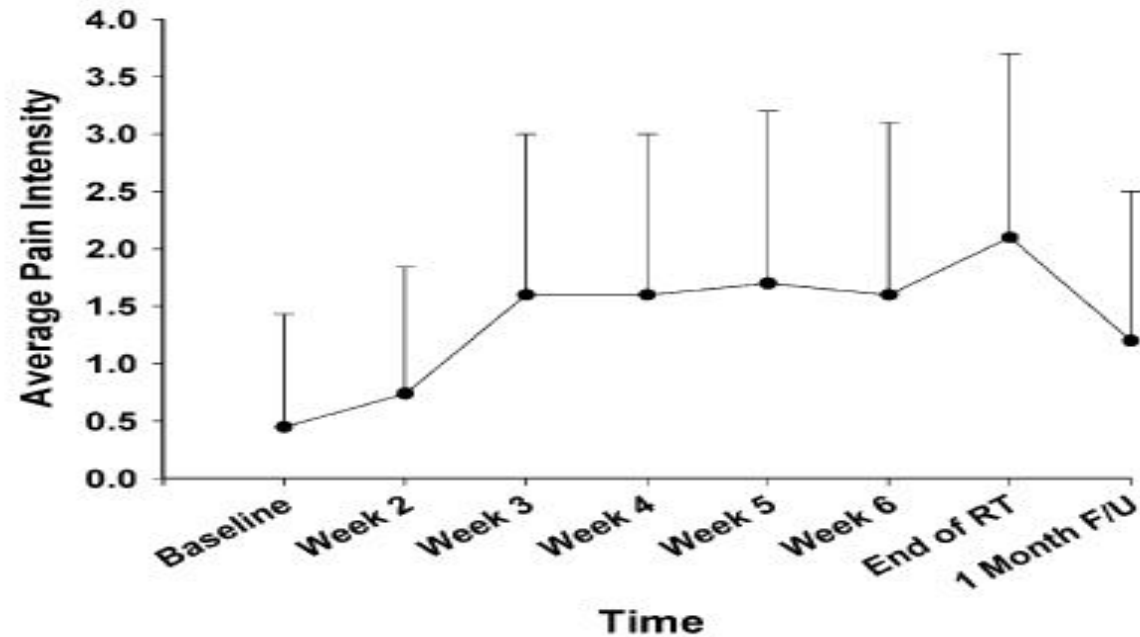


Fig. 1. Self-Care Diary of average pain intensity over time ($n = 49$) on a 0–4 scale. RT = radiation therapy; F/U = follow-up. Values are plotted as means \pm SD.

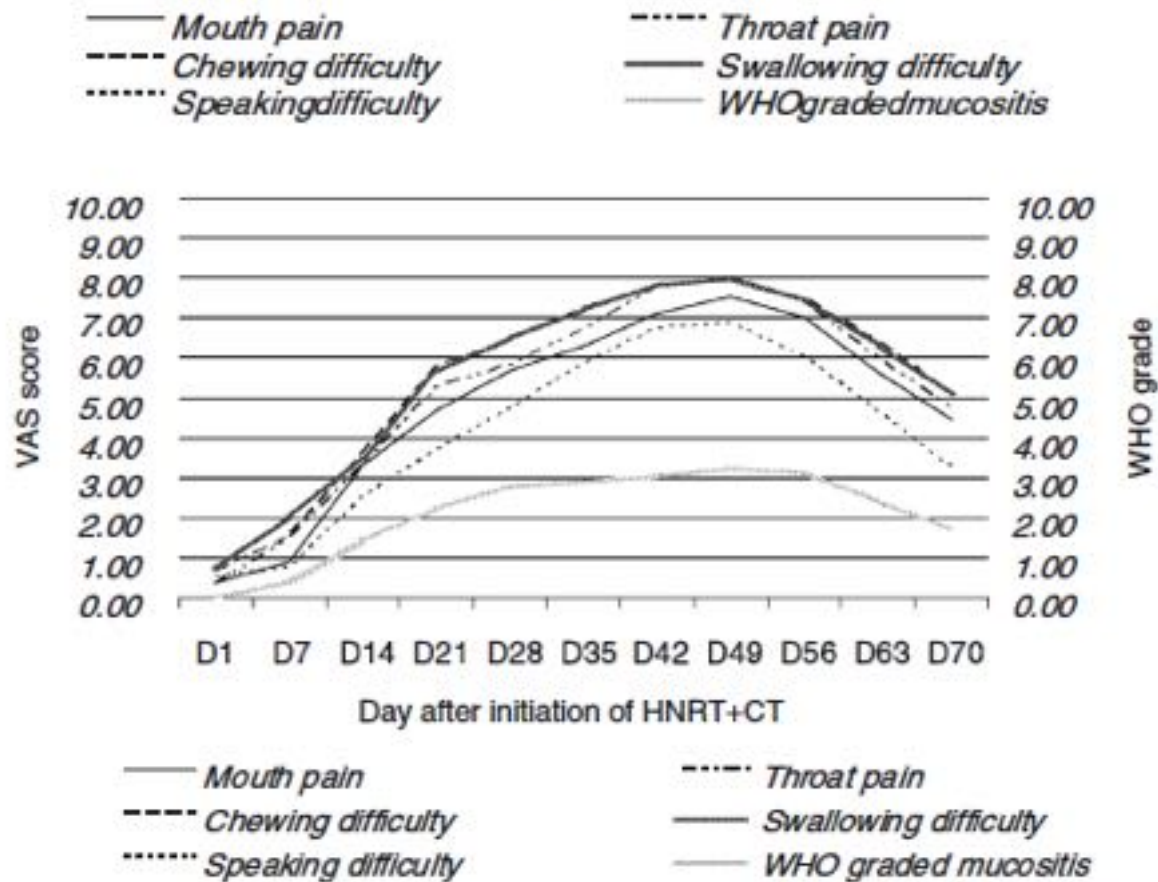
Impatto in QoL

Support Care Cancer (2010) 18:1477-1485
DOI 10.1007/s00520-009-0771-7

ORIGINAL ARTICLE

Severe oral mucositis associated with cancer therapy: impact on oral functional status and quality of life

Karis Kin-Fong Cheng · S. F. Leun



Studi innovativi recenti



Contents lists available at [ScienceDirect](#)

Oral Oncology

journal homepage: www.elsevier.com/locate/oraloncology



Randomized double-blind placebo-controlled trial of celecoxib for oral mucositis in patients receiving radiation therapy for head and neck cancer



Rajesh V. Lalla^{a,*}, Linda E. Choquette^a, Kathleen F. Curley^a, Robert J. Dowsett^a, Richard S. Feinn^b, Upendra P. Hegde^a, Carol C. Pilbeam^a, Andrew L. Salner^c, Stephen T. Sonis^d, Douglas E. Peterson^a

Studi innovativi recenti

- ✓ Incl: HN pts, RT \geq 50 Gy +/- CT
- ✓ Random: celecoxib 200 mg vs placebo (20 pts x 2)
- ✓ Valutazioni: mucosite WHO, OMAS, CTC, entità dolore, uso oppioidi, tipo dieta
- ✓ Risultati: nessuna differenza per tutti gli endpoint

Studi innovativi recenti

Support Care Cancer (2014) 22:1557–1562
DOI 10.1007/s00520-014-2117-3

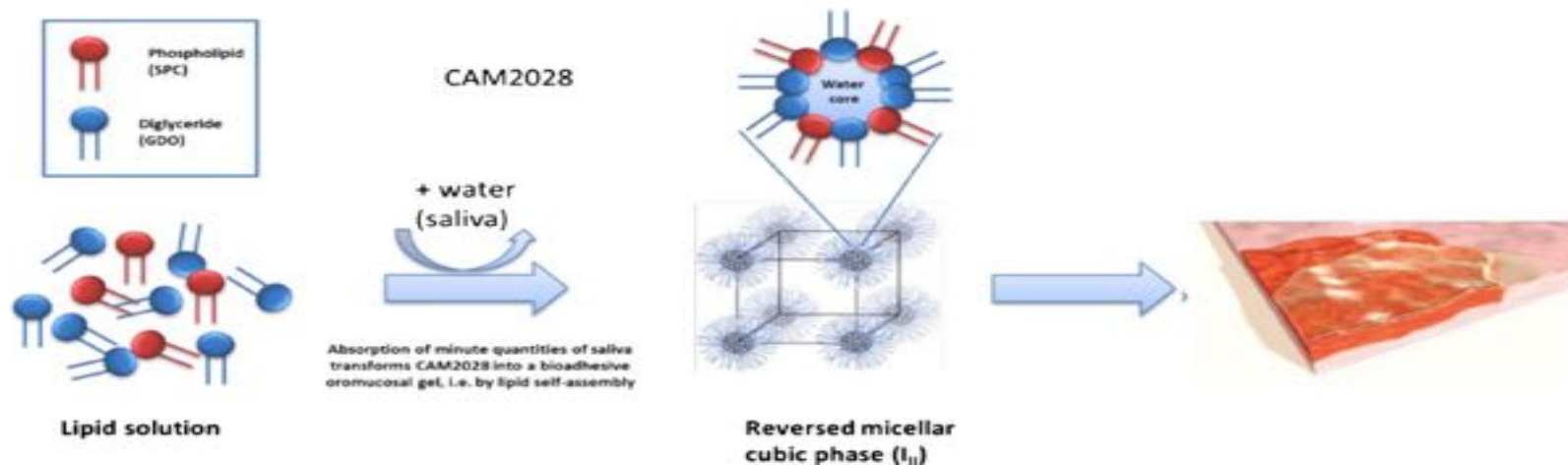
ORIGINAL ARTICLE

Treatment of oral mucositis pain following radiation therapy for head-and-neck cancer using a bioadhesive barrier-forming lipid solution

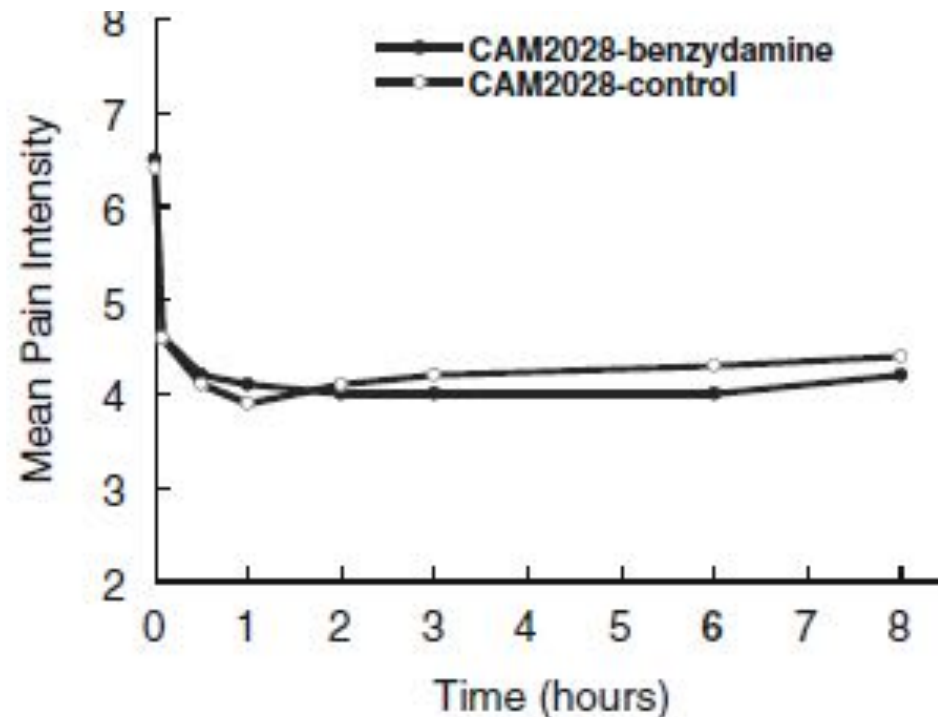
Tatiana Hadjieva • Eva Cavallin-Ståhl •
Margareta Linden • Fredrik Tiberg

Support Care Cancer (2014) 22:1557–1562

1559



- ✓ Incl: HN pts con 2 sottosedici cavità orale/ orofaringe , 3-4 settimana di RT, mucosite WHO ≥ 2 , dolore ≥ 6
- ✓ Random: CAM2028 placebo vs CAM2028 benzidamina (32 pts) day 1-3 con cross
- ✓ Valutazioni: dolore a 5 min – 1h - 6h - 8h



Studi innovativi recenti

VOLUME 32 · NUMBER 15 · MAY 20 2014

JOURNAL OF CLINICAL ONCOLOGY

ORIGINAL REPORT

Doxepin Rinse Versus Placebo in the Treatment of Acute Oral Mucositis Pain in Patients Receiving Head and Neck Radiotherapy With or Without Chemotherapy: A Phase III, Randomized, Double-Blind Trial (NCCTG-N09C6 [Alliance])

James L. Leenstra, Robert C. Miller, Rui Qin, James A. Martenson, Kenneth J. Dornfeld, James D. Bearden,

- ✓ Incl: RT (+/- CT) su 1/3 cavità orale, dolore ≥ 4 NRS
Nr = 155 pts
- ✓ Random: sciacqui con doxepina / placebo die 1;
placebo/doxepina die 2
- ✓ Valutazioni: dolore a 5-15-30-60 min
- ✓ Endpoint: riduzione AUC pain

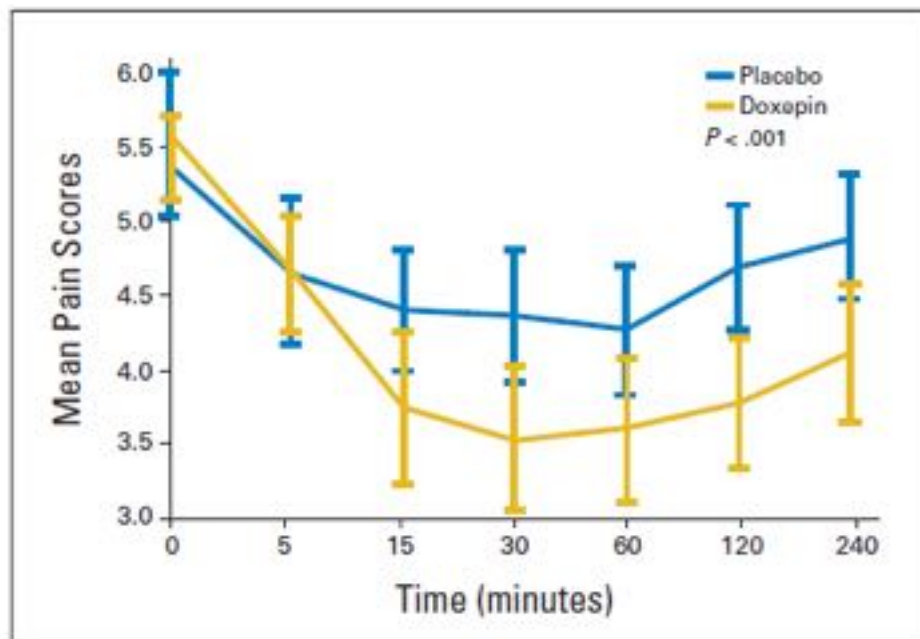


Fig 3. Average mouth and throat pain score over time, doxepin versus placebo, phase 1.

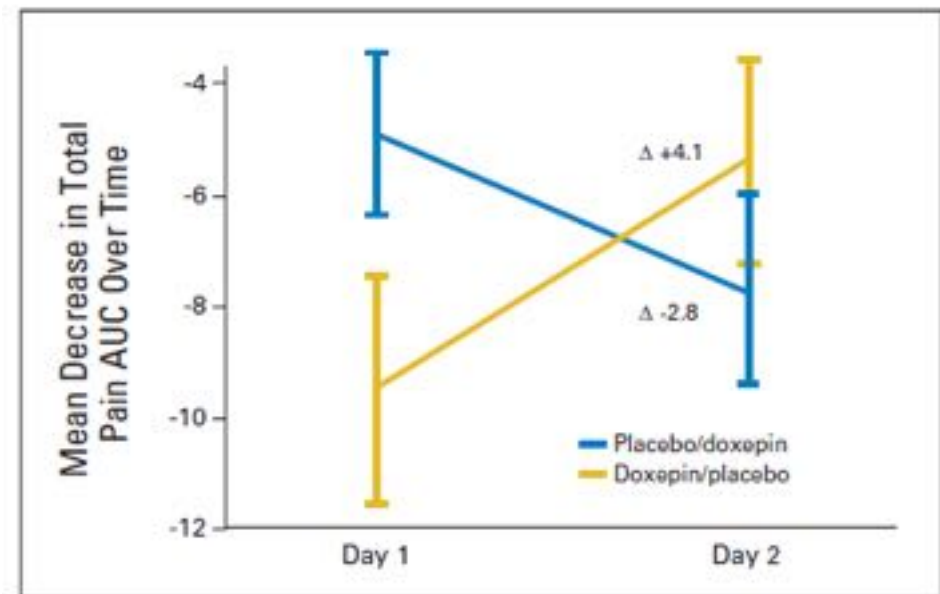


Fig 2. Crossover analysis of area under the curve (AUC) mouth and throat pain score, phases 1 and 2.

Studi innovativi in corso!

> | MÉDIAS | PRESS RELEASES | 2014 | POSITIVE PHASE II PRELIMINARY RESULTS OF VALIDIVE® FOR THE PREVENTION OF SEVERE ORAL MUCOSITIS IN HEAD AND NECK CANCER PATIENTS

Positive Phase II preliminary results of Validive® for the prevention of Severe Oral Mucositis in Head and Neck cancer patients

Positive Phase II preliminary results of Validive®

For the prevention of Severe Oral Mucositis in Head and Neck cancer patients

- Significant reduction of incidence of severe mucositis
- Improved oral mucositis related symptoms and decreased adverse events related to radiotherapy
- Good Safety profile
- Strong Compliance to treatment

Studi innovativi in fieri



PEctin Rapid Fentanyl Efficacy Clinical Trial For pAin at Swallowing undergoing radioTherapy

A multicenter randomized open trial to evaluate the efficacy of fentanyl pectin nasal spray (FPNS) versus Physician Choice (PC) - Usual Care (UC), in reducing incidental predictable breakthrough pain (IP-BTP) at swallowing in patients with head and neck cancer undergoing radiotherapy

ClinicalTrials.gov Identifier:
NCT01980498

Study phase

Multicenter, randomized, open-label phase IIIb study

Setting

In head and neck cancer care units in 20/25 Italian sites.

Population

158 patients, 79 per arm.

Study design

Randomization

Patients treated with analgesic opioids at a stable dose equivalent to 60 mg oral morphine to control background pain but with uncontrolled pain at swallowing (moderate/severe intensity: ≥ 4 on a NRS 0-10).

- *Informed consent acquired*
- *Inclusion/exclusion criteria verified*

Randomization 1:1

Fentanyl pectin nasal spray
(FPNS)

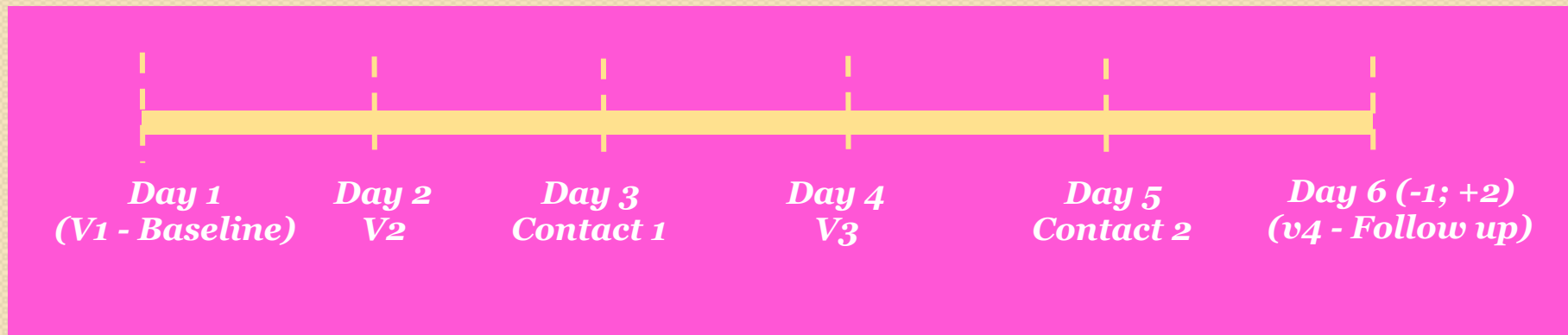
Physician choice-Usual Care
(PC-UC)

Random assignment is guaranteed by randomization software that allows a stratification of patients per centre in order to obtain a balance between the two treatment groups.



Study timeline

Study timeline



Each patient will assume the drug no more than 3 episode a day (at main meals: breakfast, lunch and dinner) for 15 episodes in total in 5/6 consecutive days.

At each episode the patients will record the pain at baseline (before drug administration), and 10, 20 30 minutes after assuming FPNS or PC-UC and records it in the diary.

Studi innovativi in fieri

**ORAL MUCOSITIS-INDUCED PAIN DURING
CONCOMITANT CHEMORADIOOTHERAPY
FOR HEAD & NECK CANCER:**

**RANDOMIZED DOUBLE BLIND TRIAL TO COMPARE
THE EFFECT OF MORPHINE MOUTHWASHES
VERSUS PLACEBO MOUTHWASHES IN REDUCING
THE USE OF SYSTEMIC FENTANYL OR MORPHINE
THERAPY**



Agencia Italiana del Farmaco AIFA

Studi innovativi in fieri

Study phase

Multicenter, randomized, double blind, phase III study

Setting

In head and neck cancer care units in 15 Italian sites.

Population

140 patients, 70 per arm.

Studi innovativi in fieri

Primary endpoint

To compare the analgesic efficacy of morphine mouthwashes with placebo in terms of difference in total dose requirement of systemic opioids. This may result in improved oral cavity pain control and a reduction of main opioids related side effects..

Indicazioni pratiche

- Identificare **il paziente e il periodo a rischio** e monitorarlo strettamente

Target: pz malnutrito – disidratato – 4° 5° settimana di terapia – mucosite – HPV pos -...

- **Monitoraggio frequente**, il dolore muta rapidamente (scale NRS, VAS, questionari, etc.)

Indicazioni pratiche

- Scegliere **farmaco più adatto**:
secondo gradino si/no – cerotto più facilmente gestibile – attenzione dolore neuropatico
- **Background** and **BTP**
- Farmaci **adiuvanti**

Indicazioni pratiche

- Prevenire **effetti collaterali** di oppiacei
- Farmaci **locali** +/- sistemici
- Educare i **caregivers**
- **Non avere paura** della morfina e similari

Dolore: CASI CLINICI/1

Maschio, 66 anni

Tumore orofaringeo cT4 CN2a HPV neg in
fumatore

Scelta terapeutica: IMRT + CDDP x 3

PS I, BMI 18, weight loss 6% peso corporeo ab
initio

Terapia concomitante: bisoprololo, cardioASA

Alla 12 seduta di RT sviluppa mucosite G2.

Calo ponderale di 2 Kg (60→58 Kg).

Algia modesta alla alimentazione

Che programma di terapia antalgica?

- 1) No farmaci: modifica dieta + anestetico locale prima di mangiare (lidocaina); counseling e sciacqui con acqua e bicarbonato
- 2) Paracetamolo 1 g x 3
- 3) Codeina + paracetamolo 1 x 3
- 4) Identificare intensità numerica (numeric rating scale) e personalizzare la scelta sulla base di colloquio su altre valutazioni accessorie

Dolore: CASI CLINICI/2


Maschio, 62 anni

Tumore laringeo cT4 cN2c

Scelta terapeutica: laringectomia totale → IMRT +
CDDP x 3

PS I, BMI 20, weight loss 3% dopo la chirurgia
(80 Kg)

Terapia concomitante: metformina – cardioASA –
duloxetina - BDZ



Alla 20 seduta di RT sviluppa algia alla
deglutizione (NRS 6/10); background pain
controllato

Calo ponderale di 2 Kg (78→76 Kg)

In terapia con Fentanyl 25 mcg/72 ore

Che programma di terapia antalgica?

UNMET NEEDS nel Paziente H&N

- Necessità di studi clinici
- **Impatto dolore su QoL**
- Ruolo dei Rapid-onset opioids
- **Dolore neuropatico**
- Ruolo dei trattamenti adiuvanti e delle strategie complementari
- **Informare pazienti e caregivers**



Grazie!

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