Associazione Italiana
Radioterapia Oncologica
Gruppo Interregionale
Lazio/Abruzzo/Molise

UNIVERSITÀ CATTOLICA del Sacro Cuore

Le terapie di supporto in Radioterapia: verso una Guida Pratica

Linee Guida nelle Terapie di Supporto nel Paziente Anziano

Giuseppe Colloca MD,PhD

GemelliART

Fondazione Policlinico A Gemelli

Rome

G.I.O.Ger.
Gruppo Italiano di Oncologia Geriatrica

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NCCN Clinical Practice Guidelines in Oncology (NCCN Guidelines®) are posted with the latest update date and version number.

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NCCN Guidelines for Treatment of Cancer by Site

NCCN Guidelines for Detection, Prevention, & Risk Reduction

NCCN Guidelines for Supportive Care

NCCN Guidelines for Age Related Recommendations

NCCN Guidelines for Patients

The NCCN guidelines are FREE! Register for a free account, then click on the cancer types below to display a drop down of options. If you are still having an issue, please contact us.

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Adult Cancer Pain

Antiemesis

Cancer- and Chemotherapy-Induced Anemia

Cancer-Associated Venous Thromboembolic Disease

Cancer-Related Fatigue

Distress Management

Myeloid Growth Factors

Palliative Care

Prevention and Treatment of Cancer-Related Infections

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Adult Cancer Pain

Version 2.2017 — May 10, 2017

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NCCN Guidelines Version 2.2017 Panel Members
Adult Cancer Pain

*Robert A. Swarm, MD/Chair φ £
Siteman Cancer Center at Barnes-Jewish Hospital and Washington University School of Medicine

Doralina L. Anghelescu, MD φ £
St. Jude Children's Research Hospital/The University of Tennessee Health Science Center

Justine Yang Bruce, MD †
University of Wisconsin Carbone Cancer Center

Sorin Buga, MD £
City of Hope Comprehensive Cancer Center

Marcin Chwistek, MD £ Þ
Fox Chase Cancer Center

Charles Cleeland, PhD θ £
The University of Texas MD Anderson Cancer Center

*David Craig, PharmD £
Moffitt Cancer Center

Oscar A. deLeon-Casasola, MD φ £
Roswell Park Cancer Institute

June G. Eilers, PhD, APRN #
Fred & Pamela Buffett Cancer Center

Ellin Gafford, MD Þ £
The Ohio State University Comprehensive Cancer Center - James Cancer Hospital and Solove Research Institute

NCCN
Karin G. Hoffmann, RN, CCM
Lisa A. Gurski, PhD
Jillian Scavone, PhD
NCCN Guidelines Panel Disclosures

Arif H. Kamal, MD, MBA, MHS † £
Duke Cancer Institute

Mihir M. Kamdar, MD Þ £
Massachusetts General Hospital Cancer Center

Susan LeGrand, MD †
Case Comprehensive Cancer Center/University Hospitals Seidman Cancer Center and Cleveland Clinic Taussig Cancer Institute

Sean Mackey, MD, PhD φ £
Stanford Cancer Institute

M. Rachel McDowell, MSN, ACNP-BC # †
Vanderbilt-Ingram Cancer Center

Natalie Moryl, MD Þ £
Memorial Sloan Kettering Cancer Center

Lisle M. Nabell, MD ‡ †
University of Alabama at Birmingham Comprehensive Cancer Center

Suzanne Nesbit, PharmD, BCPS £ Σ
The Sidney Kimmel Comprehensive Cancer Center at Johns Hopkins

*Judith A. Paice, PhD, RN # £
Robert H. Lurie Comprehensive Cancer Center of Northwestern University

Andrew Putnam, MD £
Yale Cancer Center/Smilow Cancer Hospital

Michael W. Rabow, MD Þ £
UCSF Helen Diller Family Comprehensive Cancer Center

Elizabeth Rickerson, MD φ £
Dana-Farber/Brigham and Women's Cancer Center Massachusetts General Hospital Cancer Center

Eric Roeland, MD † £
UC San Diego Moores Cancer Center

Jill Sindt, MD £ φ
Huntsman Cancer Institute at the University of Utah

Karen L. Syrjala, PhD θ £
Fred Hutchinson Cancer Research Center/Seattle Cancer Care Alliance

Susan G. Urba, MD † £
University of Michigan Comprehensive Cancer Center

Jeanie M. Youngwerth, MD Þ £
University of Colorado Cancer Center

Continue

φ Anesthesiology
£ Supportive care including palliative, pain management, pastoral care, and oncology social work
† Medical oncology
Þ Internal medicine
θ Psychiatry, psychology, including health behavior
Nursing
§ Radiotherapy/Radiation oncology
Σ Pharmacology
Ψ Neurology/neuro-oncology
‡ Hematology/Hematology oncology
* Discussion section writing committee

National Comprehensive Cancer Network®

NCCN Clinical Practice Guidelines in Oncology (NCCN Guidelines®)

Antiemesis

Version 2.2017 — March 28, 2017

NCCN.org

NCCN Guidelines for Patients® available at www.nccn.org/patients

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National Comprehensive Cancer Network®

NCCN Clinical Practice Guidelines in Oncology (NCCN Guidelines®)

Older Adult Oncology

Version 2.2017 — May 1, 2017

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MASCC Guidelines

Antiemetic Guidelines

The MASCC/ESMO Antiemetic Guidelines have been updated as of March, 2016. The revised guidelines, published in *Annals of Oncology* (vol 27;suppl 5:v119-v133, 2016) are based on the Copenhagen Consensus Conference on Antiemetic Therapy, June 2015, and have been endorsed by both MASCC and ESMO. See the MASCC/ESMO Antiemetic Guidelines for the full text of the Guidelines, supporting Consensus Recommendation Papers, and the updated Guideline Slide Set.

Mucositis Guidelines

A major effort of the Mucositis Study Group of MASCC/ISOO has been a comprehensive review of the literature related to mucositis and the development of evidence-based clinical practice guidelines. The first set of MASCC/ISOO Mucositis Guidelines was published in the journal *Cancer* in 2004. The first update of these guidelines was described in publications in 2006 and 2007. The most recent update is now available here at the MASCC website: Mucositis Guidelines. This includes a summary paper published in *Cancer* 2014 and available via open access. In addition, a set of publications in *Supportive Care in*

MASCC/ESMO ANTIEMETIC GUIDELINE 2016

Multinational Association of Supportive Care in Cancer

Organizing and Overall Meeting Chairs:
Matti Aapro, MD
Richard J. Gralla, MD
Jørn Herrstedt, MD, DMSci
Alex Molassiotis, RN, PhD
Fausto Roila, MD

Guidelines News
Breast Cancer
Cancers of Unknown Primary Site
Endocrine and Neuroendocrine Cancers
Gastrointestinal Cancers
Genitourinary Cancers
Gynaecological Cancers

ESMO Clinical Practice Guidelines: Supportive and Palliative Care

The ESMO **Clinical Practice Guidelines** (CPG) are intended to provide the user with a set of recommendations for the best standards of cancer care, based on the findings of **evidence-based medicine**.

Latest enhanced and revised set of guidelines

Supportive and palliative care are areas of **high importance in oncology** and ESMO published Clinical Practice Guidelines on the management of a variety of issues: Management of infusion reactions to systemic anticancer therapy, Management of toxicities from immunotherapy, Management of febrile neutropaenia, MASCC and ESMO consensus guidelines for the prevention of chemotherapy and radiotherapy-induced nausea and vomiting, Treatment of dyspnoea in advanced cancer patients, Central venous access in oncology, Management of oral and gastrointestinal mucosal injury, Management of refractory symptoms at the end of life and the use of palliative sedation, Advanced care

ORIGINAL ARTICLE

Olanzapine for the Prevention of Chemotherapy-Induced Nausea and Vomiting

Table 2. Primary End Point According to Study Group.

Variable	Olanzapine (N=192)	Placebo (N=188)	Total (N=380)	P Value*	Adjusted P Value†
	number/total number (percent)				
0–24 hr after chemotherapy					
No nausea	135/183 (73.8)	82/181 (45.3)	217/364 (59.6)	<0.001	0.002
Nausea	48/183 (26.2)	99/181 (54.7)	147/364 (40.4)		
25–120 hr after chemotherapy					
No nausea	75/177 (42.4)	45/177 (25.4)	120/354 (33.9)	0.001	0.002
Nausea	102/177 (57.6)	132/177 (74.6)	234/354 (66.1)		
0–120 hr after chemotherapy					
No nausea	66/177 (37.3)	39/178 (21.9)	105/355 (29.6)	0.002	0.002
Nausea	111/177 (62.7)	139/178 (78.1)	250/355 (70.4)		

* P values were calculated with the use of the chi-square test.
† P values were calculated according to the Simes gatekeeping procedure.

Cardiovascular Psychiatry and Neurology
Volume 2013 (2013), Article ID 647476, 13 pages
http://dx.doi.org/10.1155/2013/647476

Clinical Study

Risk of Mortality (including Sudden Cardiac Death) and Major Cardiovascular Events in Users of Olanzapine and Other Antipsychotics: A Study with the General Practice Research Database

Highlights in the management of pain in elderly cancer patients

Case – Mrs. AB: History of Presenting Illness

- A 70 year-old female was referred to you by her primary care physician (PCP)
- Initially presented with cough and shortness of breath on exertion
- She was given a course of antibiotics
- Had mild improvement but symptoms recurred shortly after
- Review of systems: Positive for unintentional weight loss of 10lbs and back pain

Case – Mrs. AB: Past Medical History

- Hypertension
- Hypercholesterolemia
- Chronic obstructive pulmonary disease
- Atrial fibrillation
- Diabetes mellitus
- Anxiety
- Insomnia

Case – Mrs. AB: Past Surgical History

- Hysterectomy in 1997
- Hernia repair in 2000

Case – Mrs. AB: Medications

- Metformin 500mg twice a day
- Lisinopril 20mg daily
- Metoprolol XL 50mg daily
- Aspirin 81mg daily
- Atorvastatin 40mg daily
- Lorazepam 1mg as needed
- Vitamin D 1,000 IU daily
- Spiriva/Tiotropium inhaler
- Albuterol as needed

Case – Mrs. AB: Social History

- Lives at home with her son
- Her husband passed away 2 years ago
- Used to work as a secretary, retired 10 years ago
- Ex-smoker, 20 pack years, quit 10 years ago
- Drinks occasionally (1-2 glasses of wine every week)

Case – Mrs. AB: Family History

- Has 2 brothers, 1 passed away from lung cancer (smoker)
- Another brother is still alive, has coronary artery disease
- Has 1 son and 2 daughters, one daughter has diabetes

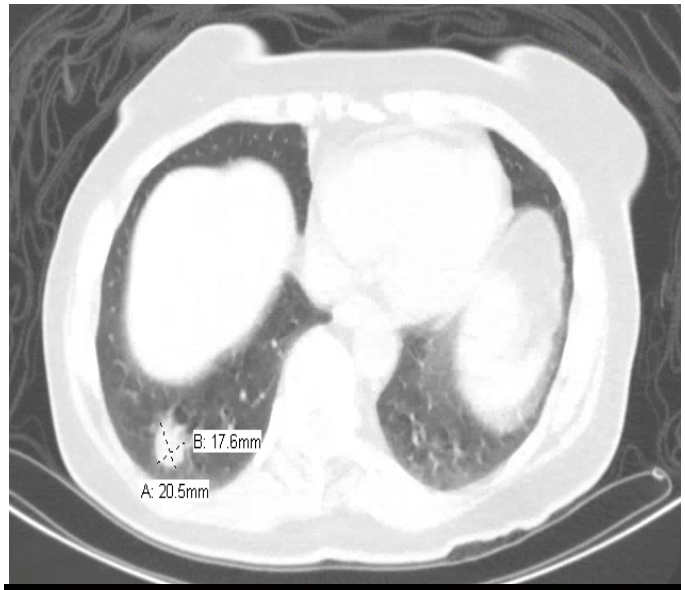
Case – Mrs. AB: Physical Examination

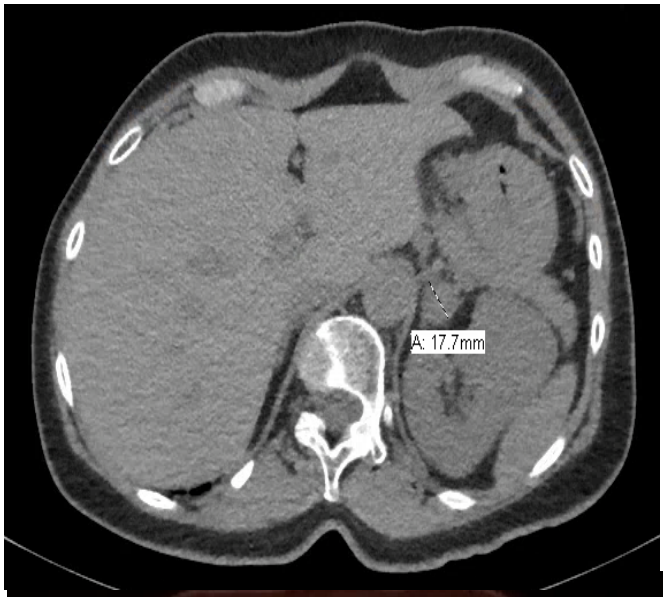
- Vitals: HR 70, RR 16, BP 130/90, Temp 37
- General: Alert, oriented
- Lung: Decreased breath sounds on the right posterior lower base, otherwise clear lung sounds, no crackles
- Cardiac: Normal heart sound, no murmurs
- Abdomen: Soft, non-tender, bowel sounds present
- Musculoskeletal: Tenderness on palpation on the mid and lower back
- Lower extremity: No swelling, tenderness or erythema

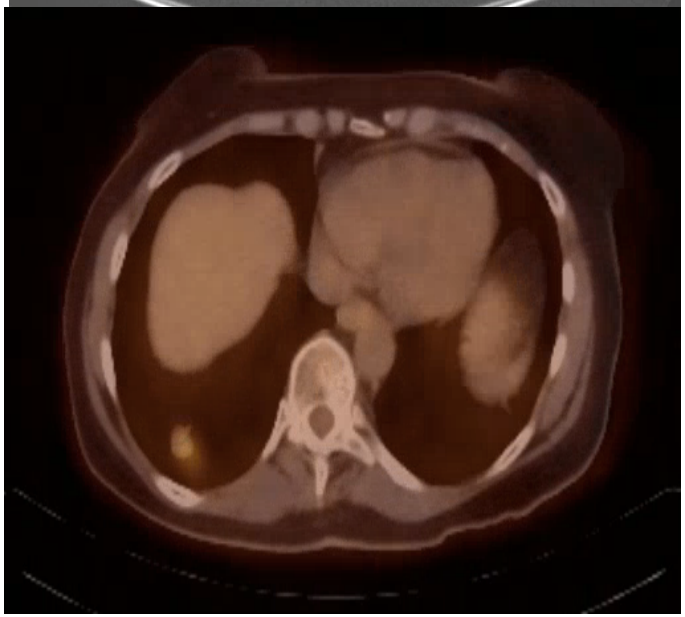
Case – Mrs. AB: Work-Up

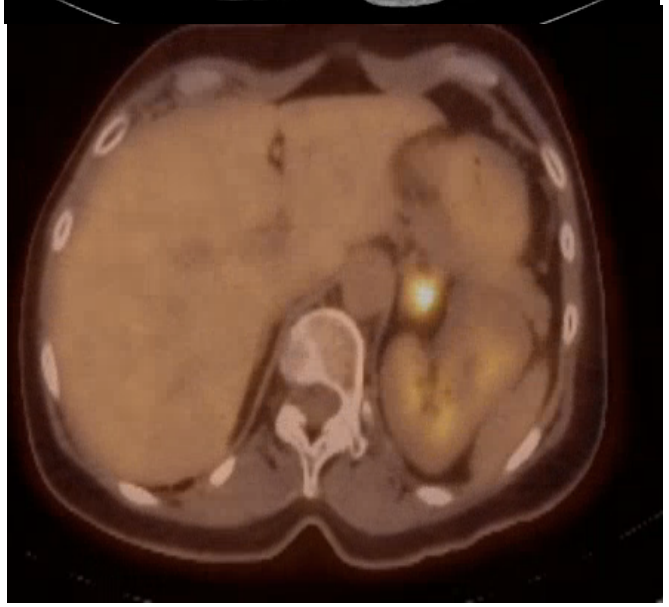
- Chest X-ray: Right lower lobe opacity
- CT chest with contrast: Right lower lobe nodule and mediastinal lymphadenopathy
- Biopsy: Lung adenocarcinoma, PD-L1<1%, ALK/ROS-1 rearrangements and EGFR mutations were negative
- PET scan: Hypermetabolic right lower lobe lung nodule, mediastinal lymphadenopathy and left adrenal nodule. Also hypermetabolic foci in the thoracic and lumbar spines
- MRI brain: No intracranial metastases

Case – Mrs. AB: CT Chest and PET Scan









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- You perform a MOCA test and she scored 21/30

Mrs. TB: Medications

- Metformin 500mg twice a day
- Lisinopril 20mg daily
- Metoprolol XL 50mg daily
- Aspirin 81mg daily
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- Lorazepam 1mg as needed
- Vitamin D 1,000 IU daily
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Supportive Care Medications

- Pre-medications:
- Granisetron 1mg
- Dexamethasone 12mg

- Antiemetics (2-4 days):
- Prochloperazine
- Ondansetron
- Dexamethasone
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Pain medications:

- Acetaminophen
- NSAIDs
- Narcotics

Other supportive care medication:

Folic acid 1mg daily

Case – Mrs. AB: History of Presenting Illness

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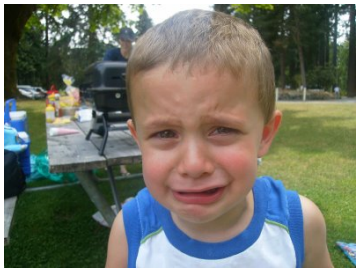
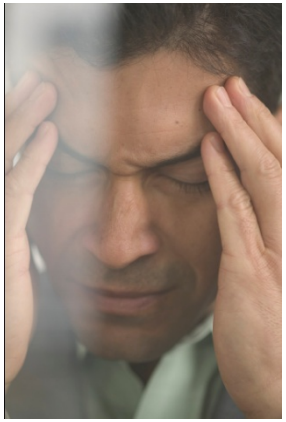
NRS: ?

What is pain?

- *Pain is a difficult word to define*
- *Patients use different words to describe pain*

Aching, Pins and needles, Annoying, Pricking, Biting, Hurting, Radiating, Blunt, Intermittent, Burning, Sore, Miserable, Splitting, Cutting, Nagging, Stabbing, Crawling, Stinging, Crushing, Tender, Dragging, Numbness, Throbbing, Dull, Overwhelming, Tingling, Electric-shock like, Penetrating, Tiring, Excruciating, Piercing, Unbearable





What is pain?

Pain is an unpleasant sensory and emotional experience associated with actual or potential tissue damage, or described in terms of such damage

IASP – International Association for the Study of Pain 2011

What is pain?

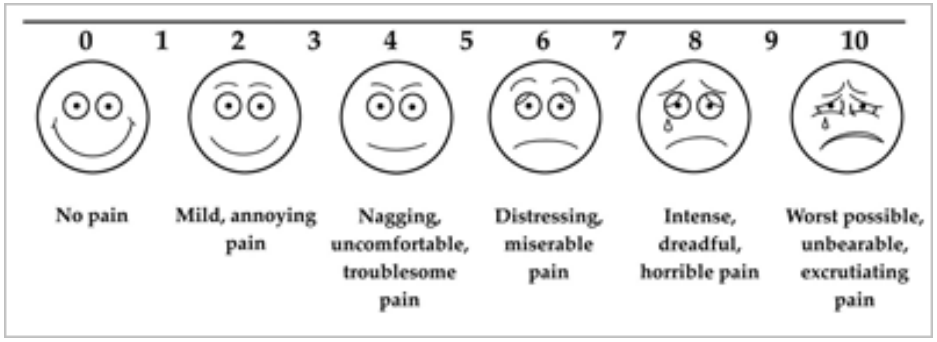
ACUTE PAIN: an unpleasant sensory and emotional experience associated with actual or potential tissue damage, or described in terms of such damage, or both.

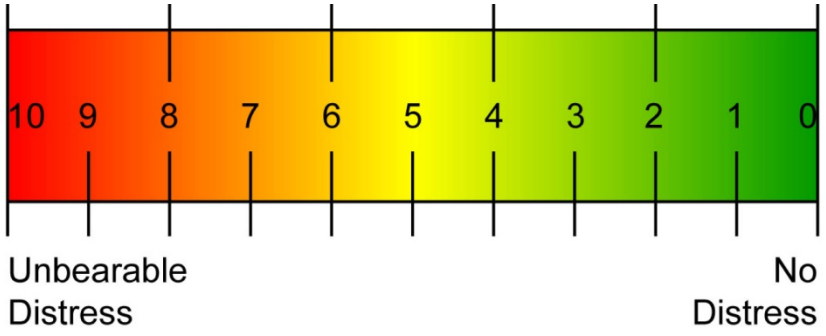
CHRONIC PAIN: persistent or recurrent pain, lasting beyond the usual course of acute illness or injury, or more than 6 months, and adversely affecting the patient's well-being.

(American Society of Anesthesiologists, 2002; Loeser et al, 2001; Merskey H et al, 1994; Portenoy et al, 1996)

Measurement of pain

- It is difficult to describe pain although we know what it is
- It is difficult to measure pain
  - visual analogue scale (VAS)
  - numeric pain rating scale (NRS)





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Pain Assessment in Advanced Dementia Scale (PAINAD)

Instructions: Observe the patient for five minutes before scoring his or her behaviors. Score the behaviors according to the following chart. Definitions of each item are provided on the following page. The patient can be observed under different conditions (e.g., at rest, during a pleasant activity, during caregiving, after the administration of pain medication).

Behavior	0	1	2	Score
Breathing Independent of vocalization	• Normal	• Occasional labored breathing • Short period of hyperventilation	• Noisy labored breathing • Long period of hyperventilation • Cheyne-Stokes respirations	
Negative vocalization	• None	• Occasional moan or groan • Low-level speech with a negative or disapproving quality	• Repeated troubled calling out • Loud moaning or groaning • Crying	
Facial expression	• Smiling or inexpressive	• Sad • Frightened • Frown	• Facial grimacing	
Body language	• Relaxed	• Tense • Distressed pacing • Fidgeting	• Rigid • Fists clenched • Knees pulled up • Pulling or pushing away • Striking out	
Consolability	• No need to console	• Distracted or reassured by voice or touch	• Unable to console, distract, or reassure	
			TOTAL SCORE	

(Warden et al., 2003)

Scoring:

The total score ranges from 0-10 points. A possible interpretation of the scores is: 1-3=mild pain; 4-6=moderate pain; 7-10=severe pain. These ranges are based on a standard 0-10 scale of pain, but have not been substantiated in the literature for this tool.

Source:

Warden V, Hurley AC, Volicer L. Development and psychometric evaluation of the Pain Assessment in Advanced Dementia (PAINAD) scale. *J Am Med Dir Assoc.* 2003;4(1):9-15.

The Specificity theory of pain

Renè Descartes 1664

Gate Control Theory

Melzack and Wall 1965

Neuromatrix Theory of pain

Melzach 2001

Melzack and Wall came up with a newer theory of pain that answered some of these questions. This new theory, the neuromatrix theory, stipulates that every human being has an innate network of neurons that they named the“body-self neuromatrix.”

Each person’s matrix of neurons is unique and is affected by all facets of the person’s physical, psychological, and cognitive traits, and also by their experience.

BODY SELF NEUROMATRIX

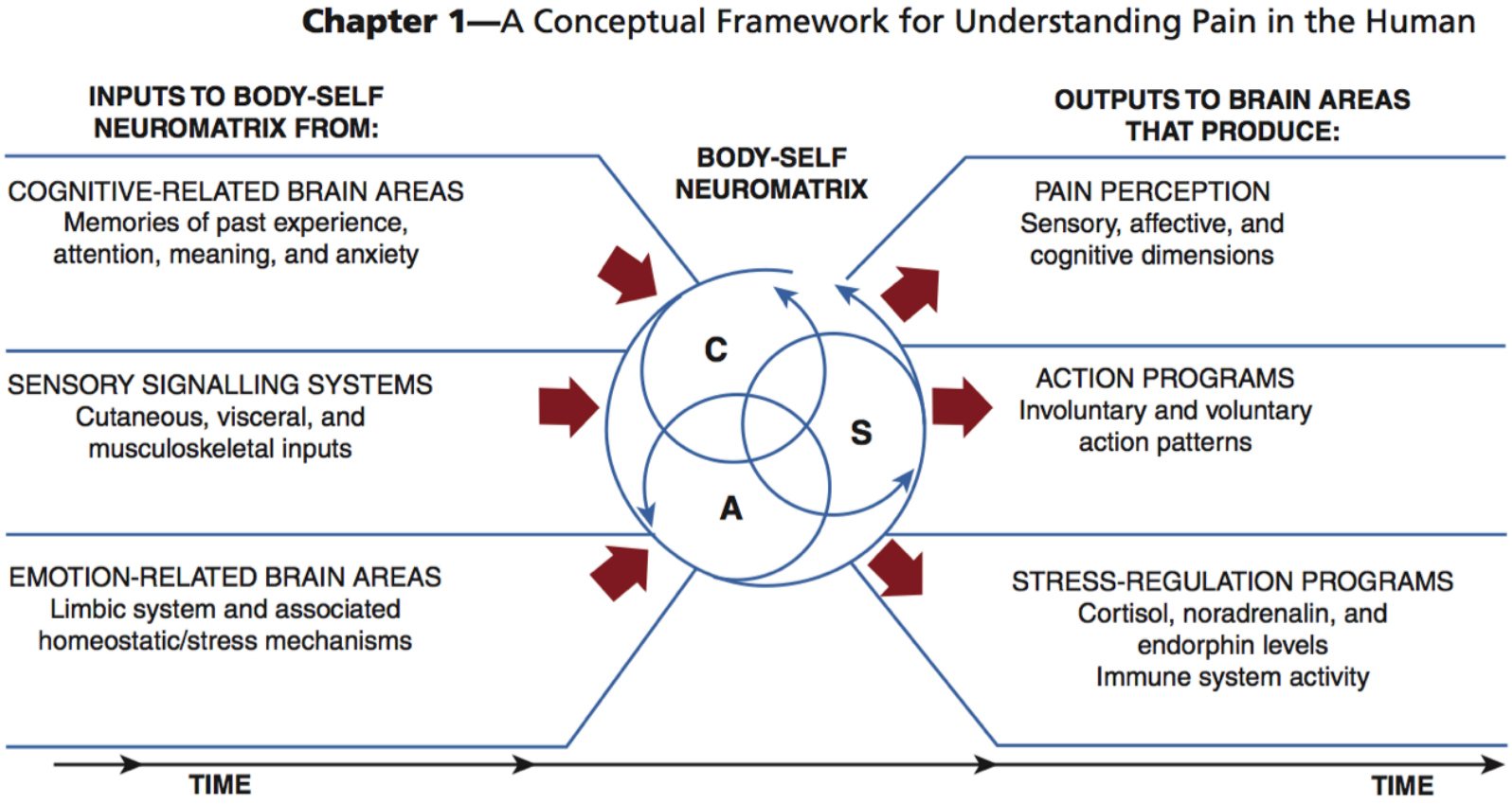
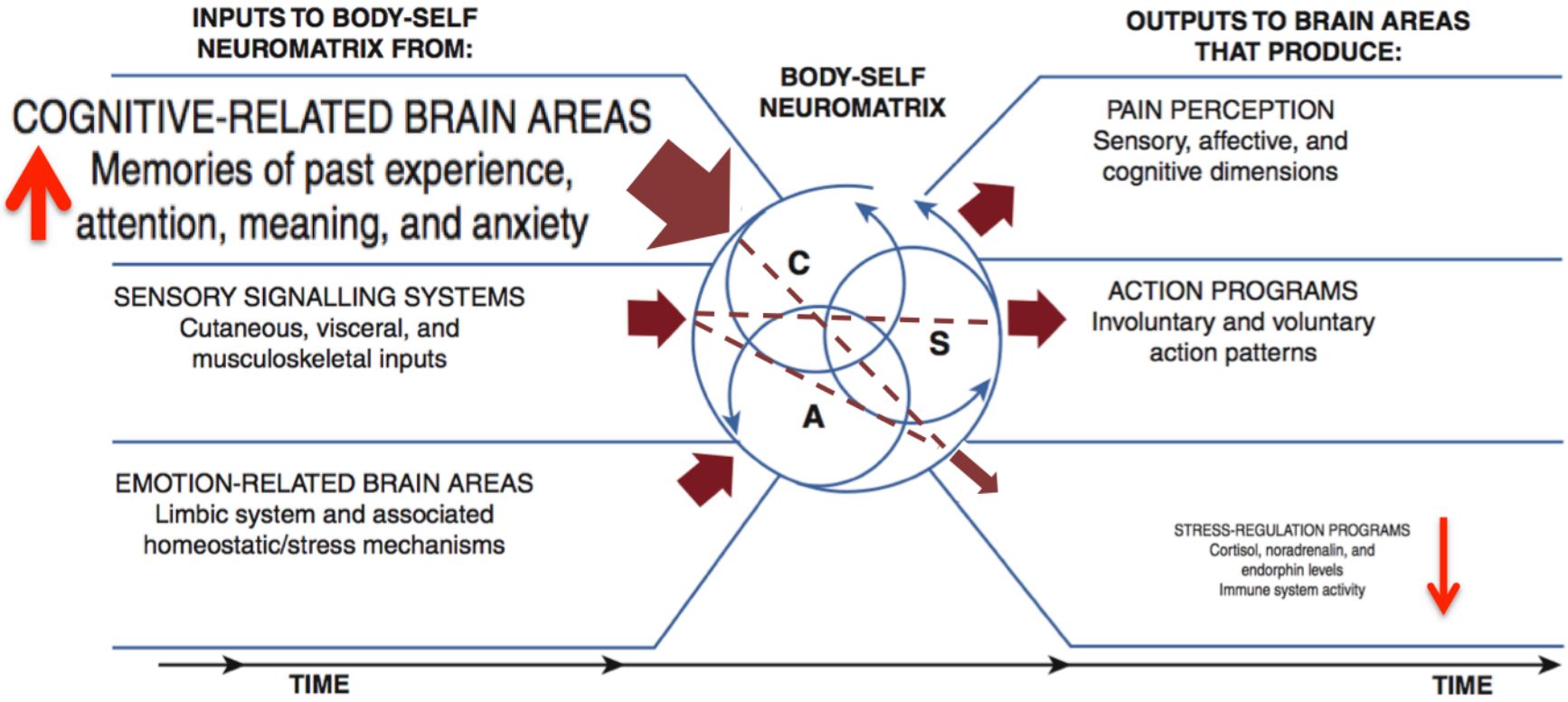


Fig. 1.3 Factors that contribute to the patterns of activity generated by the body-self neuromatrix, which is composed of sensory, affective, and cognitive neuromodules. The output patterns from the neuromatrix produce the multiple dimensions of pain experience, as well as concurrent homeostatic and behavioral responses. *(From Melzack R: Pain and the neuromatrix in the brain,* J Dent Educ *65:1378–1382, 2001.)*

IMAGE: Updated Neuromatrix Model. Waldman SD; Pain Management, 2nd Ed. (Saunders) 2011
p. 5. Ch. 1: A Conceptual Framework for Understanding Pain in the Human. Joel Katz and Ronald Melzack

BODY SELF NEUROMATRIX



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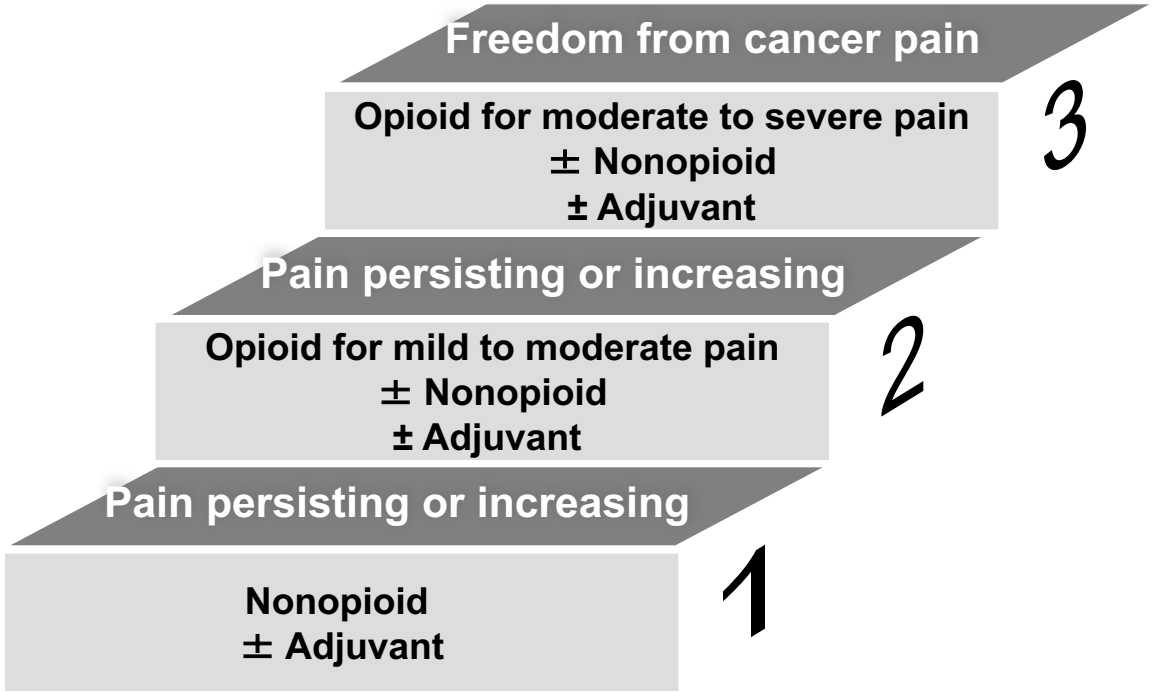
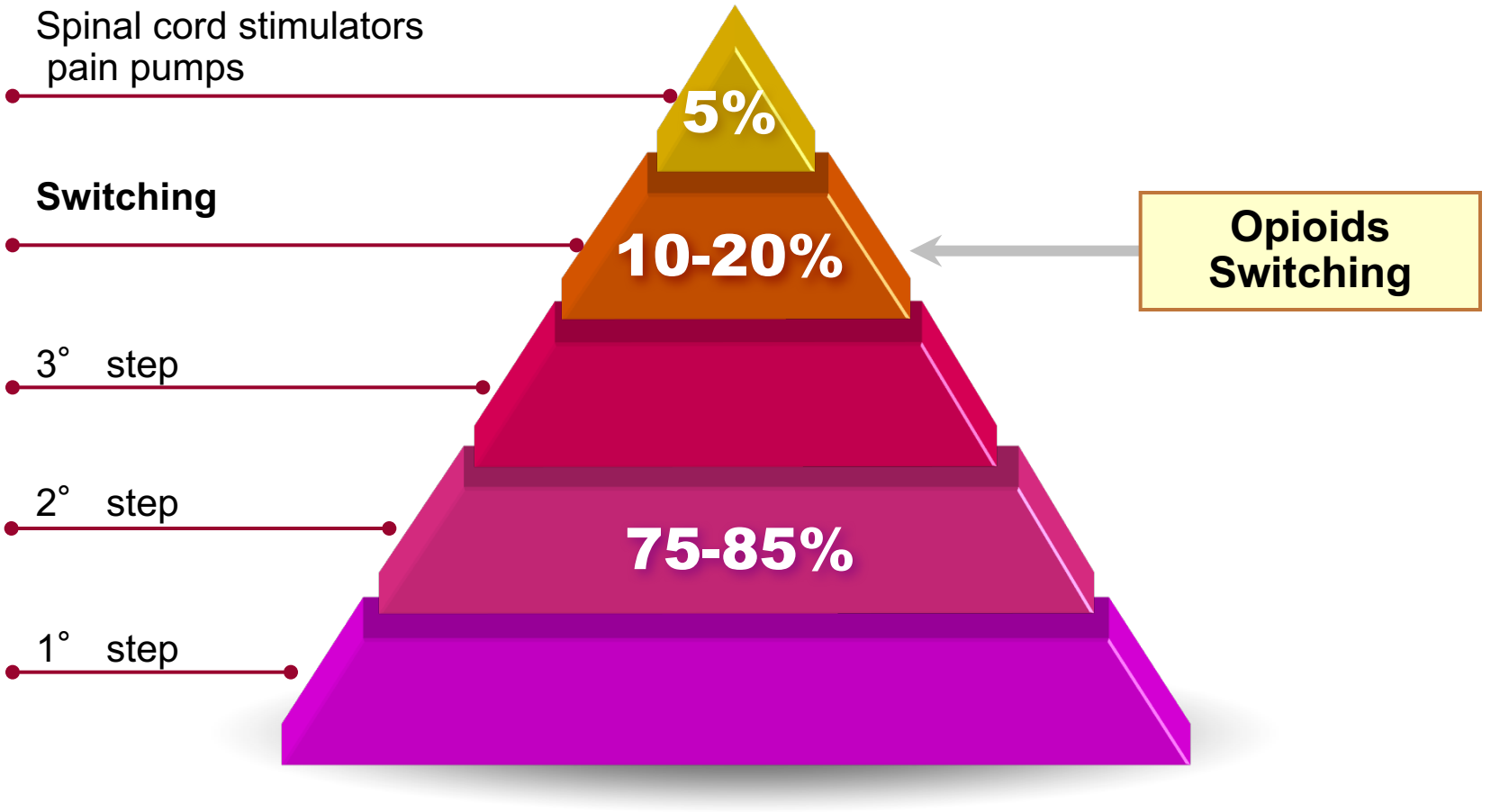
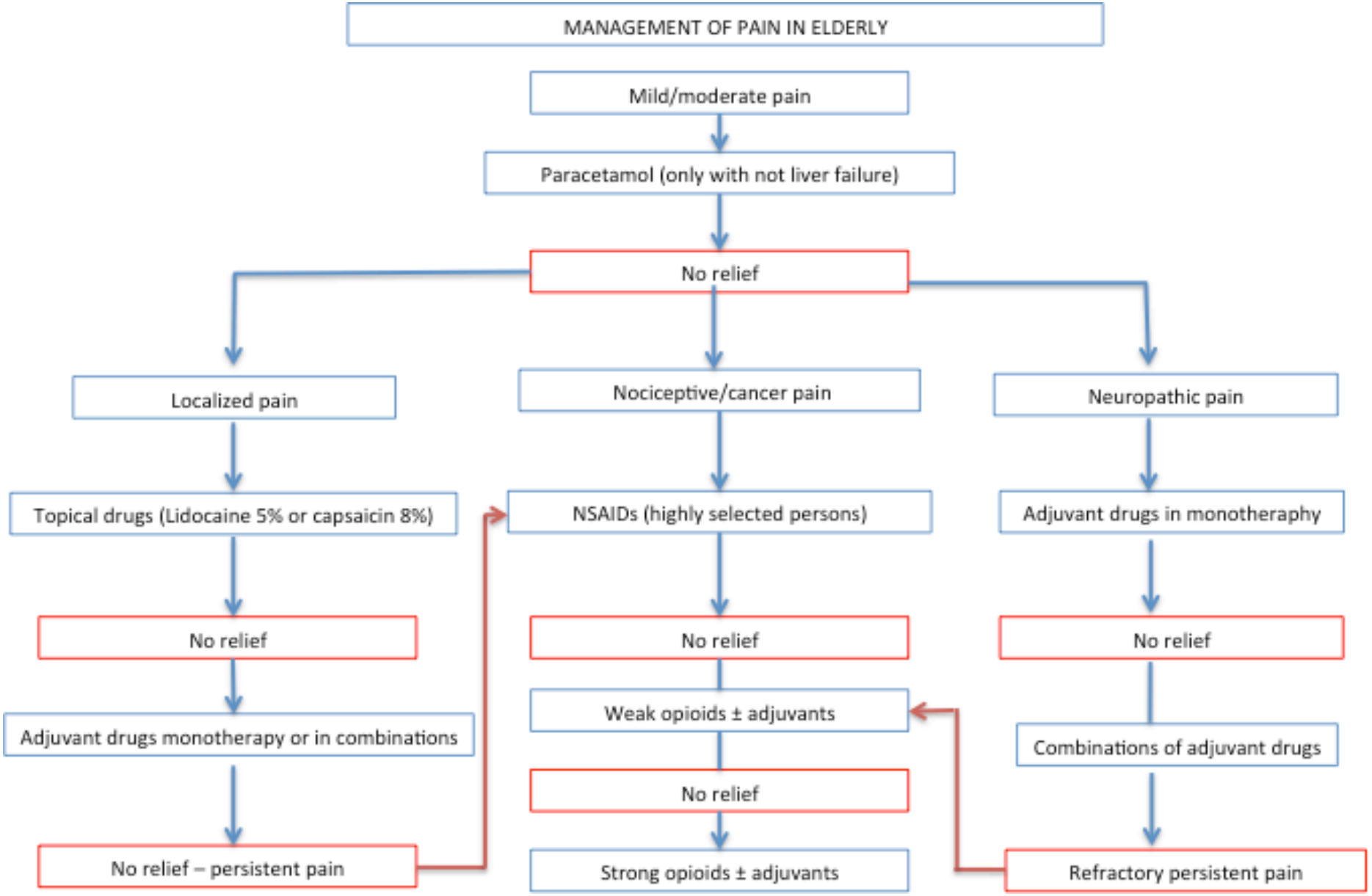
A Practical Approach to Pain Management

The World Health Organization Ladder for Chronic Cancer Pain Management

Medical therapies remain the mainstay of chronic cancer pain management.




Spinal cord stimulators
pain pumps
5%
Switching
10-20%
Opioids
Switching
3° step
2° step
75-85%
1° step



Colloca G, Curr Pharm Des. 2015;21(13):1706-14

The World Health Organization Ladder for Chronic Cancer Pain Management
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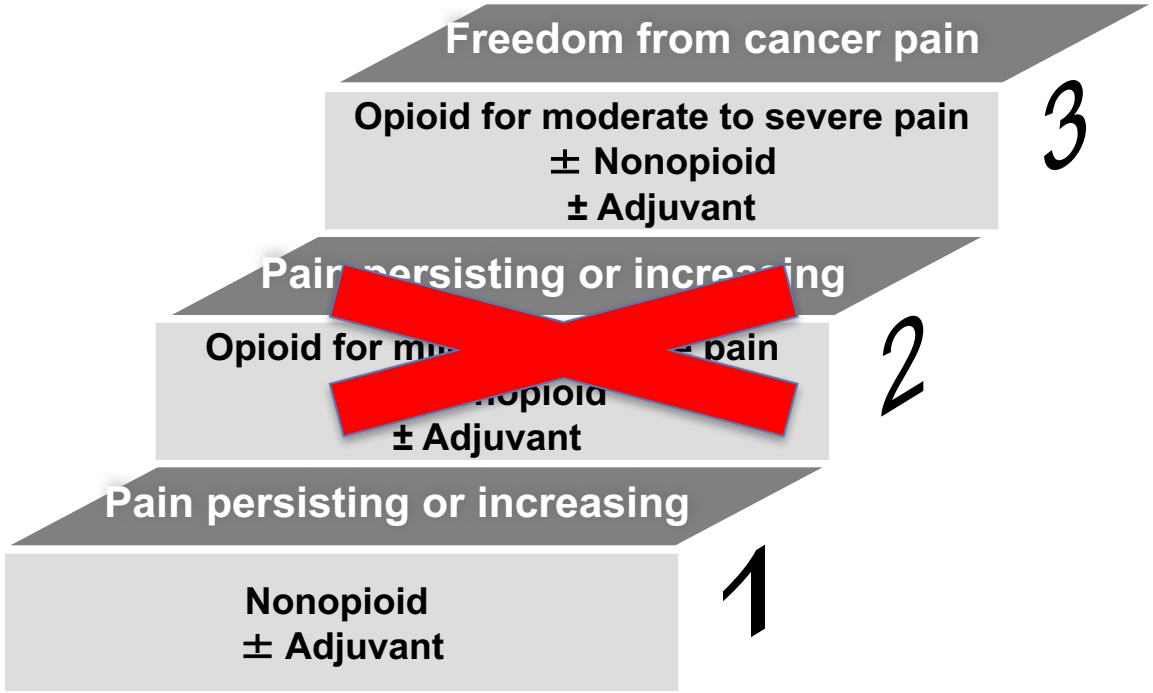

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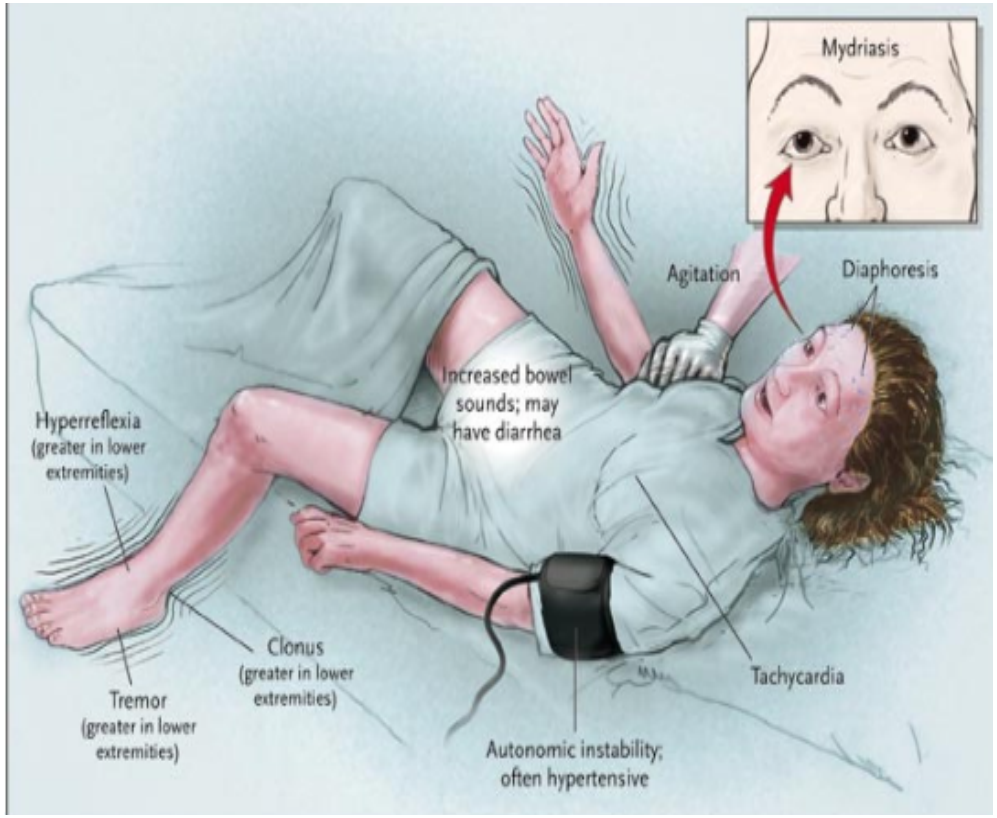
Geriatric Setting

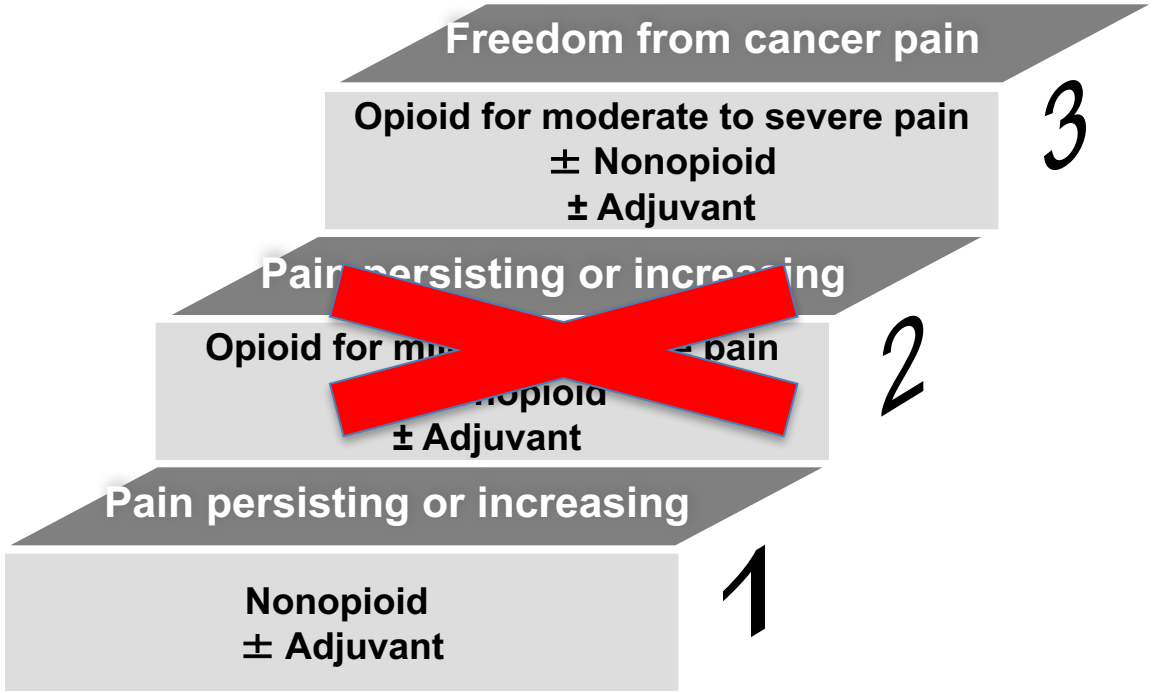
Serotonin Syndrome

Confusion
Agitation or restlessness
Dilated pupils
Headache
Changes in blood pressure and/or temperature
Nausea and/or vomiting
Diarrhea
Rapid heart rate
Tremor
Loss of muscle coordination or twitching muscles
Shivering and goose bumps
Heavy sweating



da Boyer et al, N Engl J Med 2005; 352:1112-1120

The World Health Organization Ladder for Chronic Cancer Pain Management
Medical therapies remain the mainstay of chronic cancer pain management.



Opioid Use and Addiction

Opioids for Chronic Pain—United States, 2016 CME

Deborah Dowell and Coauthors

JAMA | Special Communication, April 19, 2016

Children of the CDC Guideline for Prescribing Opioids for Chronic Pain: Above All, Do No Harm

Neil L. Schechter and Gary A. Walco

JAMA Pediatrics | Editorial, May 2016

Pain: Not for the Faint of Heart

Mitchell H. Katz

JAMA Internal Medicine | Editorial, May 2016

Seeking Balance Between Pain Relief and Safety: CDC Issues New Opioid-Prescribing Guidelines

William Renthal

JAMA Neurology | Editorial, May 2016

The CDC Guideline on Opioid Prescribing: Rising to the Challenge

Yngvild Olsen

JAMA | Editorial, April 19, 2016

Zero Pain Is Not the Goal

Thomas H. Le

JAMA | Editor

Opioid Prescribing After Surgical Extraction of Teeth in Medicaid Patients, 2000-2010

James A. Baker and Coauthors

JAMA | Research Letter, April 19, 2016

Opioids Prescribed After Low-Risk Surgical Procedures in the United States, 2004-2012

Hannah Wunsch and Coauthors

JAMA | Research Letter, April 19, 2016

Opioids fo

LeShaundra C

JAMA | JAMA

MEDPAGE TODAY®

Public Health & Policy > Opioids

Trump Declares Opioid Crisis a Public Health Emergency

— A good first step, but more efforts are needed, say observers

by Joyce Frieden, News Editor, MedPage Today

October 26, 2017

JUNE 2015

NATIONAL GEOGRAPHIC

WEED

THE NEW SCIENCE OF MARIJUANA

Should Captive Dolphins Be Freed?

Dry Times Are Here for the Aral Sea

Living Goddesses of Nepal

TIME

The Highly Divisive, Curiously Underfunded and Strangely Promising

World of Pot Science

BY BRUCE BARCOTT & MICHAEL SCHERER

Cannabinoids in the management of difficult to treat pain

Ethan B Russo

GW Pharmaceuticals, Vashon, WA, USA

Abstract: This article reviews recent research on cannabinoid analgesia via the endocannabinoid system and non-receptor mechanisms, as well as randomized clinical trials employing cannabinoids in pain treatment. Tetrahydrocannabinol (THC, Marinol®) and nabilone (Cesamet®) are currently approved in the United States and other countries, but not for pain indications. Other synthetic cannabinoids, such as ajulemic acid, are in development. Crude herbal cannabis remains illegal in most jurisdictions but is also under investigation. Sativex®, a cannabis derived oromucosal spray containing equal proportions of THC (partial CB_1 receptor agonist) and cannabidiol (CBD, a non-euphoriant, anti-inflammatory analgesic with CB_1 receptor antagonist and endocannabinoid modulating effects) was approved in Canada in 2005 for treatment of central neuropathic pain in multiple sclerosis, and in 2007 for intractable cancer pain. Numerous randomized clinical trials have demonstrated safety and efficacy for Sativex in central and peripheral neuropathic pain, rheumatoid arthritis and cancer pain. An Investigational New Drug application to conduct advanced clinical trials for cancer pain was approved by the US FDA in January 2006. Cannabinoid analgesics have generally been well tolerated in clinical trials with acceptable adverse event profiles. Their adjunctive addition to the pharmacological armamentarium for treatment of pain shows great promise.

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Original Reports

Cannabis for the Management of Pain: Assessment of Safety Study (COMPASS)

Mark A. Ware,[*,†] Tongtong Wang,[‡] Stan Shapiro,[‡,§] and Jean-Paul Collet[¶] for the COMPASS STUDY TEAM[1]

*Departments of *Anesthesia, †Family Medicine, ‡Epidemiology, Biostatistics and Occupational Health, McGill University, Montreal, Quebec, Canada.*
§Centre for Clinical Epidemiology, Jewish General Hospital, Montreal, Quebec, Canada.
¶Department of Pediatrics, University of British Columbia; Child and Family Research Institute, Vancouver, British Columbia, Canada.

Clinical Review & Education

Special Communication

CDC Guideline for Prescribing Opioids for Chronic Pain—United States, 2016

Deborah Dowell, MD, MPH; Tamara M. Haegerich, PhD; Roger Chou, MD

CONCLUSIONS AND RELEVANCE The guideline is intended to improve communication about benefits and risks of opioids for chronic pain, improve safety and effectiveness of pain treatment, and reduce risks associated with long-term opioid therapy.

Original Investigation

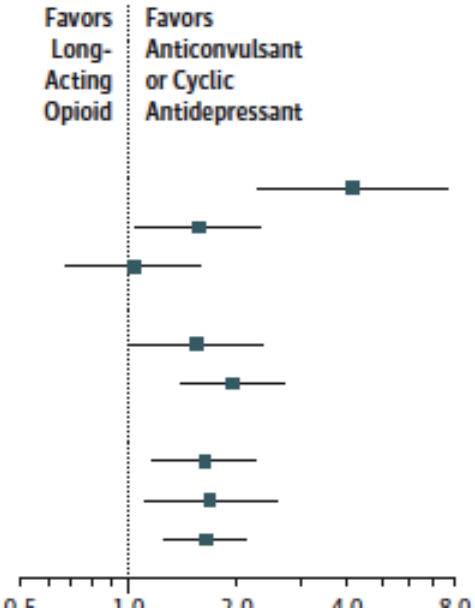
Prescription of Long-Acting Opioids and Mortality in Patients With Chronic Noncancer Pain

Wayne A. Ray, PhD; Cecilia P. Chung, MD, MPH; Katherine T. Murray, MD; Kathi Hall, BS; C. Michael Stein, MB, ChB

Supplemental content at

Figure. Mortality According to Study Drug Duration, Dose, and Baseline Use of Short-Acting Opioids

	Anticonvulsant or Cyclic Antidepressant			Long-acting Opioid				
	No. of Patients	Person-Years	No. of Deaths	No. of Patients	Person-Years	No. of Deaths	Risk Difference (95% CI)	Hazard Ratio (95% CI)
Time since drug started, d								
≤30	22912	2054	13	22912	2042	53	200 (80 to 420)	4.16 (2.27-7.63)
31-180	11752	3026	40	12194	3534	70	74 (7 to 172)	1.56 (1.05-2.30)
>180	3765	2986	34	5584	5494	62	3 (-37 to 65)	1.03 (0.67-1.57)
Study drug dose during follow-up								
Low	13345	3311	31	19564	5381	75	51 (1 to 125)	1.54 (1.01-2.34)
High	13495	4755	56	9637	5689	110	111 (47 to 200)	1.94 (1.40-2.70)
Short-acting opioid at baseline, mg								
≤30	14590	5275	54	14504	6949	110	63 (16 to 128)	1.62 (1.16-2.25)
>30	8322	2792	33	8408	4121	75	80 (13 to 184)	1.68 (1.11-2.56)
All	22912	8066	87	22912	11070	185	69 (28 to 121)	1.64 (1.26-2.12)



Substance Abuse and Rehabilitation

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REVIEW

Identifying and assessing the risk of opioid abuse in patients with cancer: an integrative review

Conclusion: Screening questionnaires and urine drug screens indicated at least one in five patients with cancer may be at risk of opioid-use disorder. Several studies demonstrated associations between high-risk patients and clinical outcomes, such as aberrant behavior, prolonged opioid use, higher morphine-equivalent daily dose, greater health care utilization, and symptom burden.

Substance Abuse and Rehabilitation 2016:7

Opioid Therapy - Titrate to Effect