



ESRA Italian Chapter

XXVIII CONGRESSO NAZIONALE

PRESIDENTE
DEL CONGRESSO
Luciano Calderone

Dr.ssa Laura Demartini
ICS Maugeri, Pavia

Pharmacological pain therapy Opioids, friends or enemies?



PALERMO 5-7 Ottobre
XXVIII CONGRESSO
NAZIONALE



Disclosures

Consultant for

- Abbott
- Boston Scientific



Pain control:
a need stressed only by
pharmaceutical
companies?

I tell you a story

MA, 56 aa, M

At 40 y age, diagnosis of eosinophilic granulomatosis for which he was prescribed high dose steroid

In 2010 vertebral fracture of T4 due to a minor trauma

Surgical treatment was excluded. To control pain, he was prescribed transdermal fentanyl and transmucosal fentanyl for incident pain

Now he refers no more pain in the thoracic region; he refers diffuse pain mainly in the lumbar region where he present disk and joint degenerative disease no more controlled by pharmacological therapy:

Oxycodone 40 mg x 2, transmucosal Fentanyl 600 ug x 6!!!!

= 520 mg morphine equivalent/day

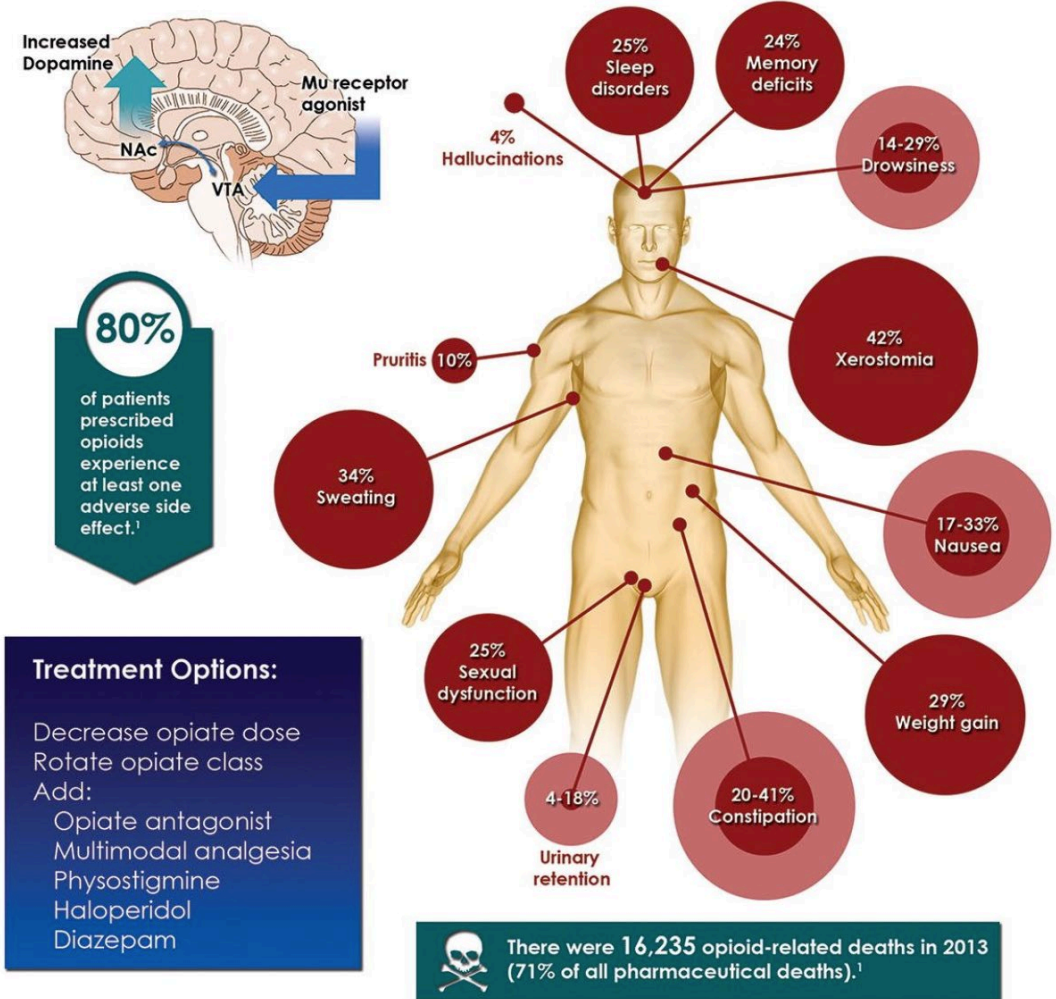


Side effects

- Sleep apnea
- Hypogonadotropic hypogonadism
- Hyperalgesia

Opioids and Adverse Effects: More Than Just Opium Dreams

Opioid hallucinations have been most strongly associated with morphine and tramadol, and are one of many potential adverse effects.¹



INFOGRAPHIC: #Opioids and Adverse Effects - "More than Just Opium Dreams" journals.lww.com/anesthesia-ana... #meded #FOAMed

Sleep-disordered breathing decreases after opioid withdrawal: results of a prospective controlled trial

Andreas Schwarzer^{a,*}, Marie Aichinger-Hinterhofer^a, Christoph Maier^a, Jan Vollert^a, Jörg Werner Walther^b

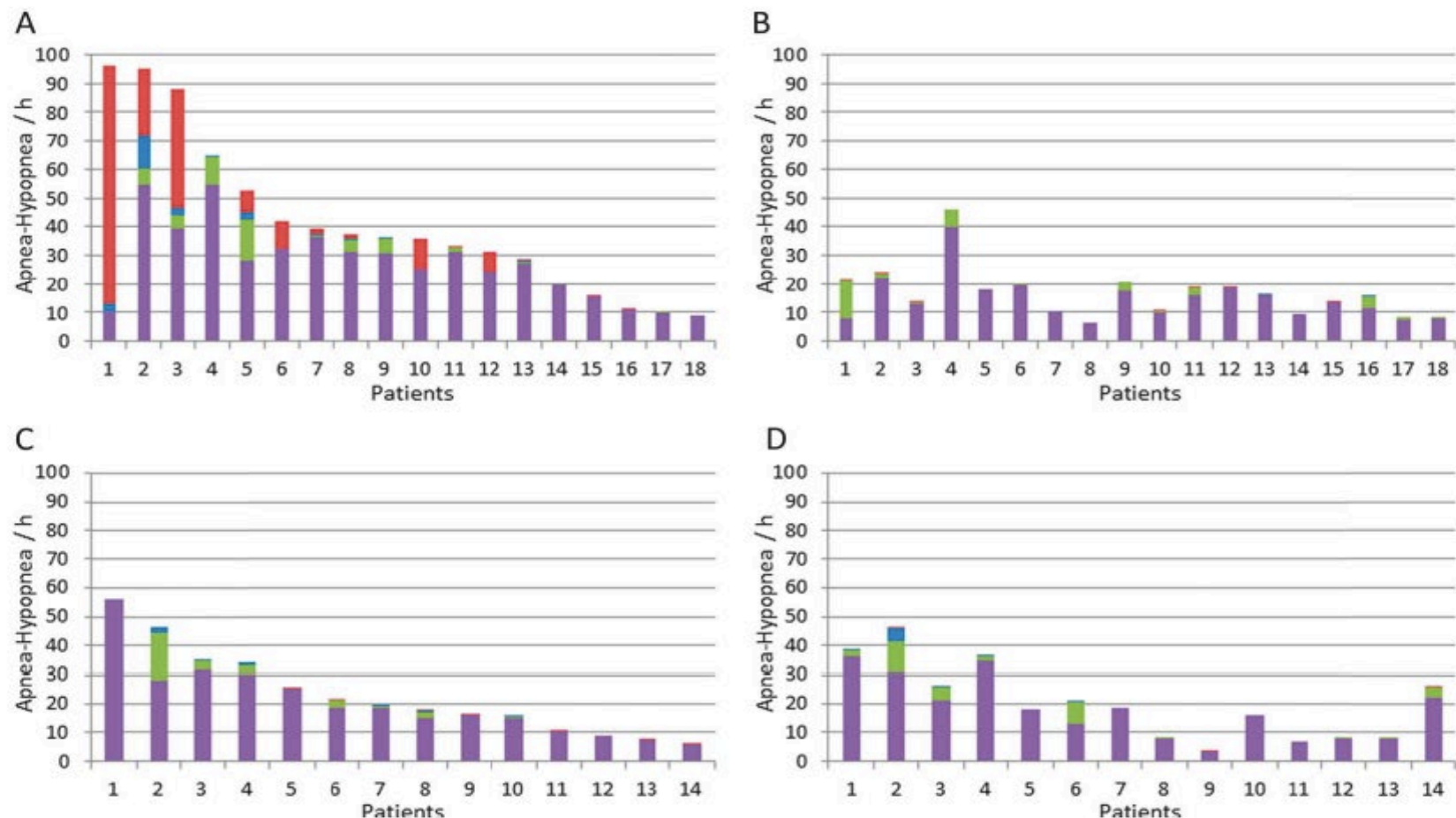
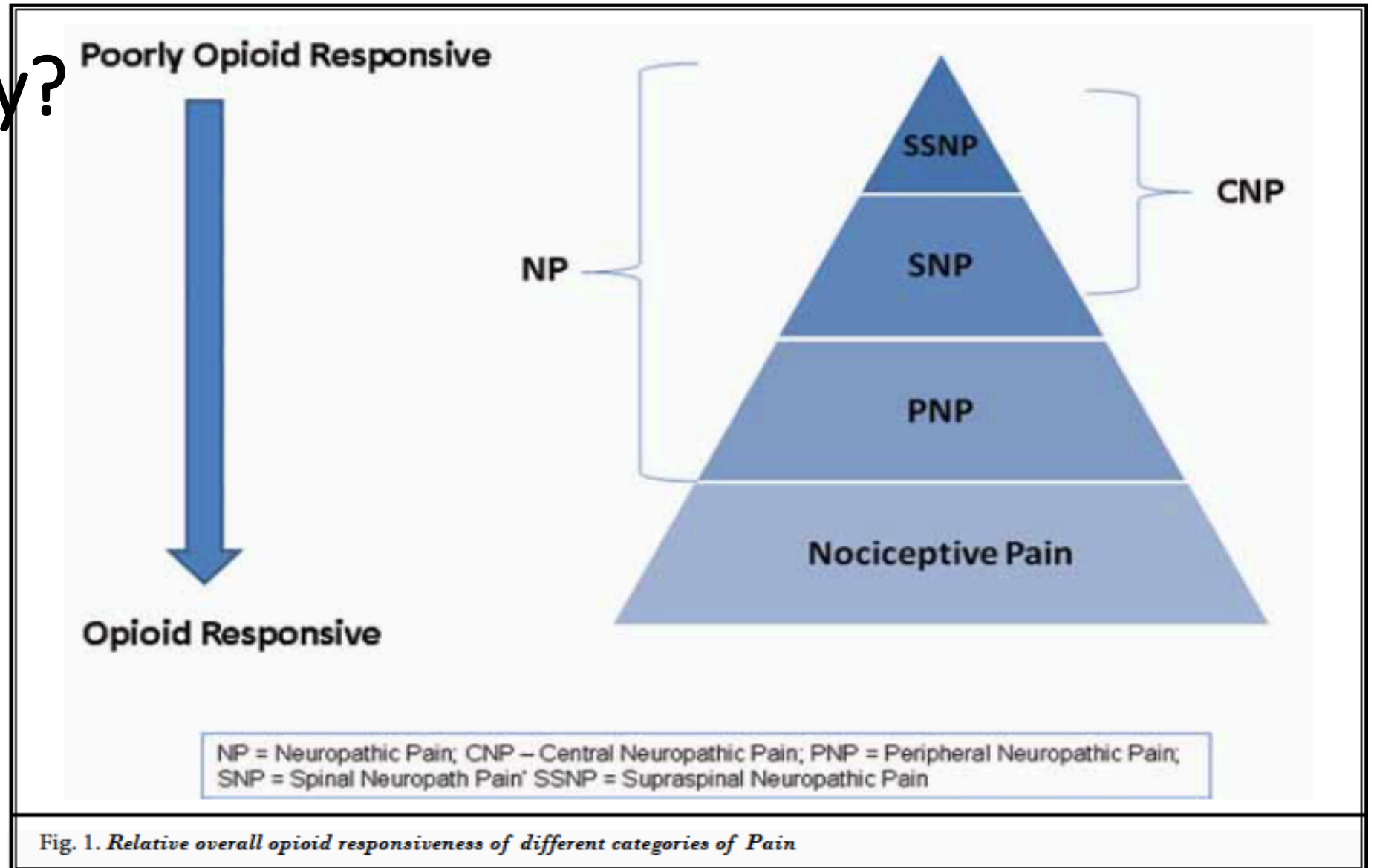
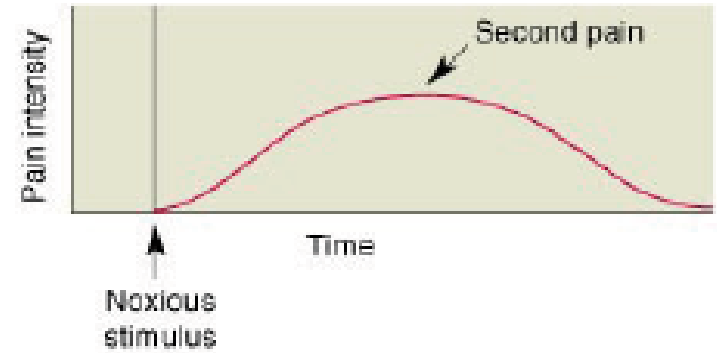
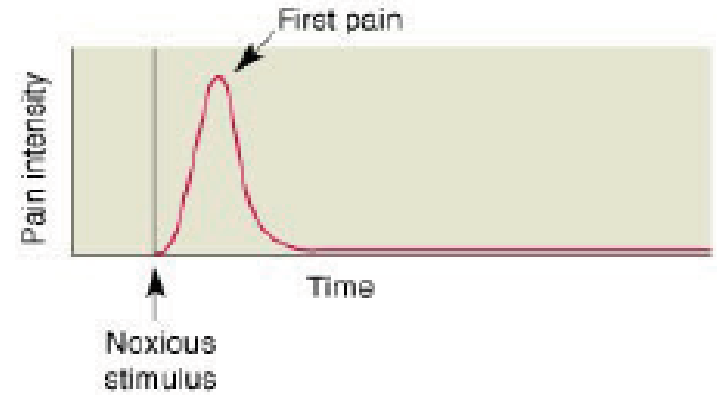
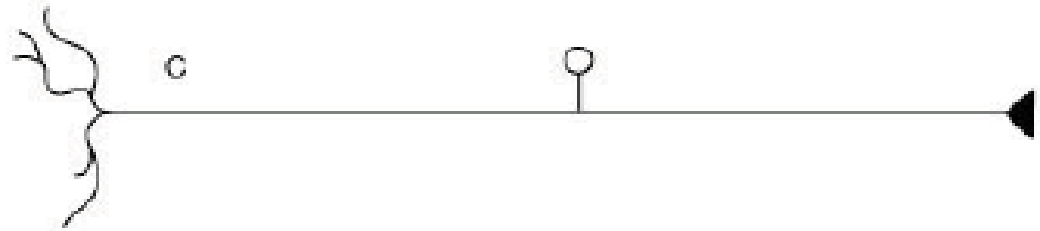
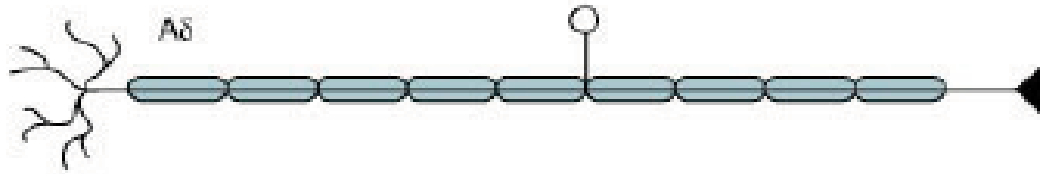


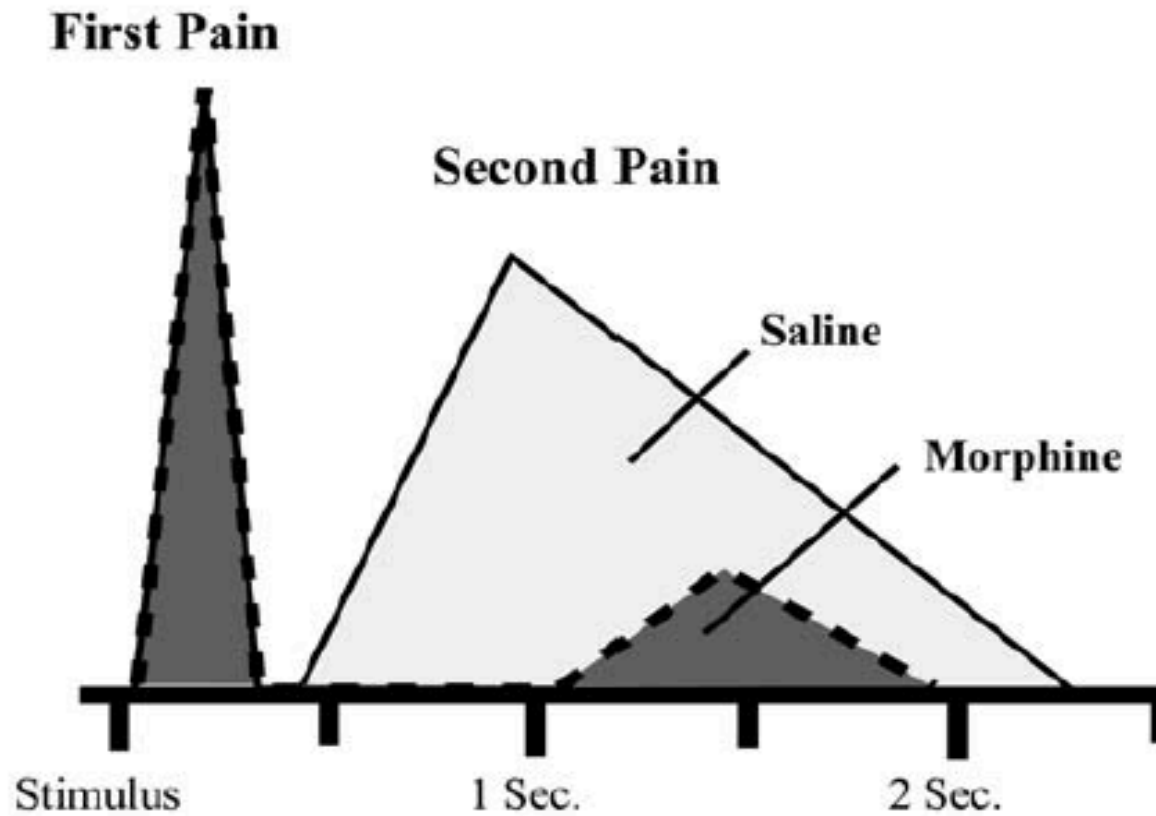
Figure 2. Distribution of central (red), mixed (blue), and obstructive (green) apneas and hypopneas (violet) in the apnea-hypopnea index. (A) Apnea-hypopnea index at baseline in the opioid withdrawal group; (B) Apnea-hypopnea index after treatment in the opioid withdrawal group; (C) Apnea-hypopnea index at baseline in the control group; (D) Apnea-hypopnea index after treatment in the control group.

And efficacy?



Sensitive fibres and opioids





Morphine 0,1mg/kg

Opioids, Effects of Systemic Morphine on Evoked Pain, Figure 1 Average tracings of 6 subjects who followed the time-course and rated the magnitude of first and second pain elicited by 50~ms of electrocutaneous stimulation ($1.28\sim\text{mA}/\text{mm}^2$; 0.5~ms pulses at 200~Hz) delivered to one lateral calf. Time course estimates utilized a finger-span device attached to a potentiometer, and the magnitudes of first and second pain were rated verbally, using ► [free magnitude estimation](#). Administration of 10~mg morphine sulphate 1~h before testing did not alter the magnitude of first pain. In contrast, second pain (dashed line) was delayed in onset and substantially reduced in magnitude and duration by morphine, relative to control measurements (solid line) (from Cooper et al. 1986).

Opioids, Effects of Systemic Morphine on Evoked Pain

CJ Vierck Jr

- Opioids (even endogenous) control the tonic component of pain at rest but not the phasic component evoked by movement and weight bearing in order to prevent further lesion to a damaged tissue
- But...
- High doses of a systemic opioid (minimum 3 mg/kg) are able to reduce nociceptive reflexes mediated by $A\delta$ ϕ 1 β ερσ

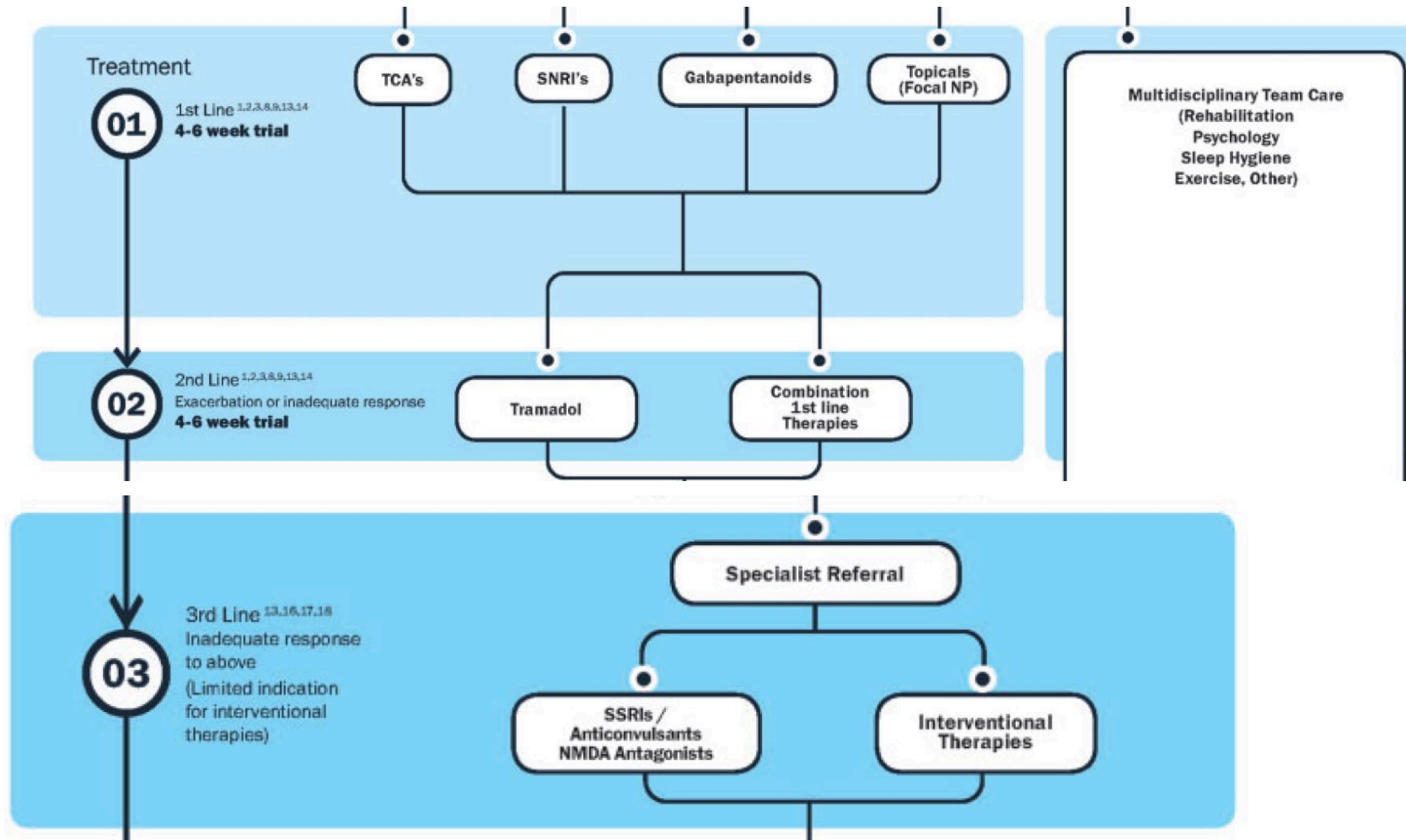
A Comprehensive Algorithm for Management of Neuropathic Pain

Daniel Bates, MD,* B. Carsten Schultheis, MD, PhD,[†] Michael C. Hanes, MD,[‡] Suneil M. Jolly, MD,^{§,¶} Krishnan V. Chakravarthy, MD, PhD,^{||,¶¶} Timothy R. Deer, MD,** Robert M. Levy, MD, PhD,^{††} and Corey W. Hunter, MD^{‡‡}

Pain Medicine, 20, 2019, S2–S12

doi: 10.1093/pm/pnz075

Review Article



04

4th Line ^{1,3,7,8}

Inadequate response to above,
VAS $\geq 5/10$, 6 month of NP

>50% pain relief with trial prior to implant

Neuromodulation

05

5th Line ^{3,4,8,9,14}

Inadequate response to above
4-6 week trial
Regular 3 month review

Low Dose Opioids

06

6th Line ^{15,16,17,18}

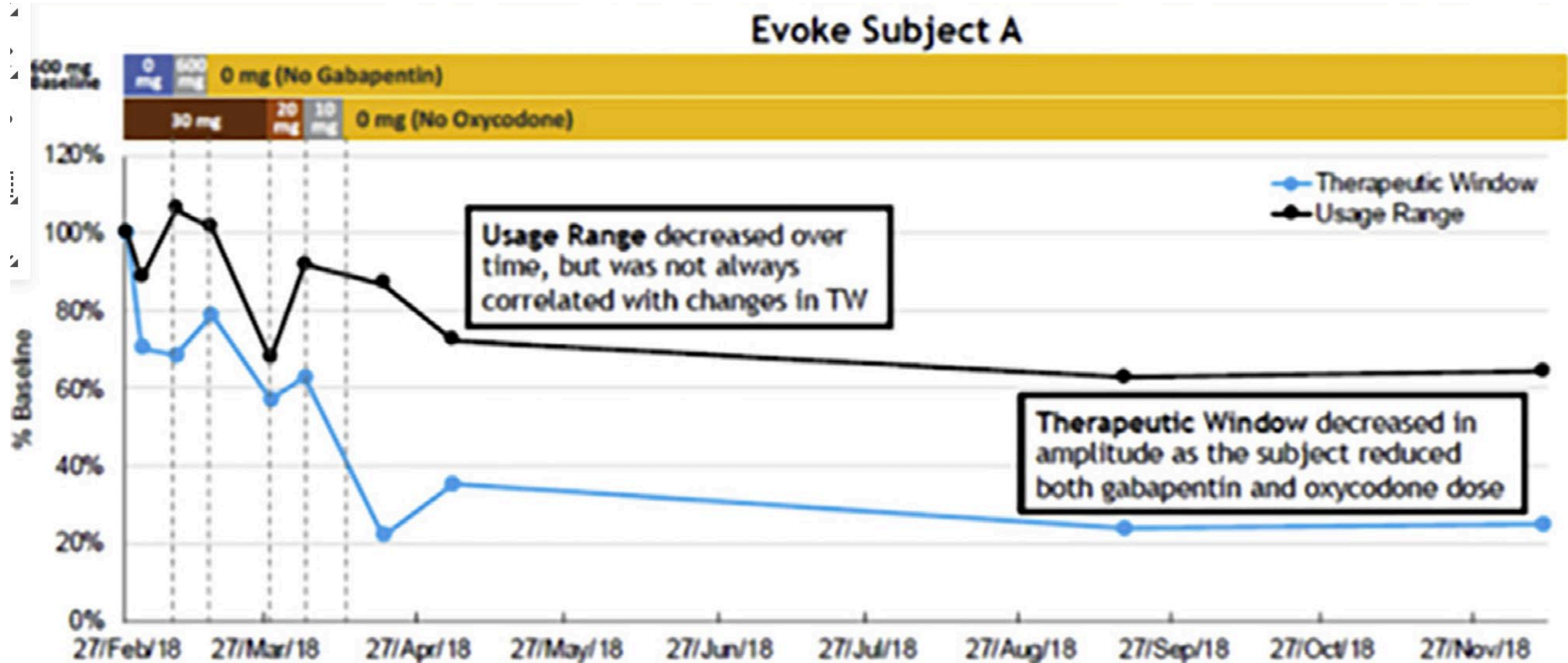
Inadequate response to neuromodulation, plus
- recommend >50 MED
- strongly recommend > 90 MED

>50% pain relief with trial prior to implant

Targeted Drug Delivery

LONG-TERM OPIOID-SPARING EFFECTS OF ECAP-CONTROLLED CLOSED-LOOP SPINAL CORD STIMULATION: EVOKE AND AVALON STUDY RESULTS

Steven Rosen, MD¹, Todd Bromberg, MD¹, Shrif Costandi, MD², Michael Sprintz, MD³, Marc Russo, MBBS⁴, Lalit Venkatesan, PhD⁵, Mena Mekhail, MD⁵, Nathan Taylor, BSc (Hons)⁶





CDC Clinical Practice Guideline for Prescribing Opioids for Pain — United States, 2022

Deborah Dowell, MD¹; Kathleen R. Ragan, MSPH¹; Christopher M. Jones, PharmD, DrPH²; Grant T. Baldwin, PhD¹; Roger Chou, MD³

- Recommendations for opioid prescription for chronic pain by general practitioners, apart from cancer pain and palliative care
- Guidelines on:
 1. When begin with opioids;
 2. Opioid selection, dosage, time, follow-up, stop;
 3. Evaluation of risks and prevention of side effects

PRESCRIPTION OPIOIDS HAVE BENEFITS AND RISKS

Many Americans suffer from chronic pain. These patients deserve safe and effective pain management. Prescription opioids can help manage some types of pain in the short term. However, we don't have enough information about the benefits of opioids long term, and we know that there are serious risks of opioid use disorder and overdose—particularly with high dosages and long-term use.

CDC GUIDELINE FOR PRESCRIBING OPIOIDS FOR CHRONIC PAIN

Among the 12 recommendations in the Guideline, there are three principles that are especially important to improving patient care and safety:

- ✓ Nonopioid therapy is preferred for chronic pain outside of active cancer, palliative, and end-of-life care.
- ✓ When opioids are used, the lowest possible effective dosage should be prescribed to reduce risks of opioid use disorder and overdose.
- ✓ Clinicians should always exercise caution when prescribing opioids and monitor all patients closely.

PATIENT CARE AND SAFETY IS CENTRAL TO THE GUIDELINE

Before starting opioids to treat chronic pain, patients should:

- Make the most informed decision with their doctors
- Learn about prescription opioids and know the risks
- Consider ways to manage pain that do not include opioids, such as:
 - Physical therapy
 - Exercise
 - Nonopioid medications, such as acetaminophen or ibuprofen
 - Cognitive behavioral therapy (CBT)

1 OPIOIDS ARE NOT FIRST-LINE THERAPY

2 ESTABLISH GOALS FOR PAIN AND FUNCTION

3 DISCUSS RISKS AND BENEFITS

4 USE IMMEDIATE-RELEASE OPIOIDS WHEN STARTING

5 USE THE LOWEST EFFECTIVE DOSE

Reconsider alternative options before increasing the dose over 50 MME
Do not prescribe over 90 MME

6 PRESCRIBE SHORT DURATIONS FOR ACUTE PAIN

Usually 3 days therapy is enough

7

EVALUATE BENEFITS AND HARMS FREQUENTLY

Evaluate the patient at least every 4 weeks

8

USE STRATEGIES TO MITIGATE RISK

Eventual use of naloxone

9

REVIEW PDMP DATA

Prescription Drug Monitoring Program

10

USE URINE DRUG TESTING

11

**AVOID CONCURRENT OPIOID AND
BENZODIAZEPINE PRESCRIBING**

12

OFFER TREATMENT FOR OPIOID USE DISORDER

**It is not true that an early
prescription of opioids can
prevent chronic pain**

Opioids are very useful drugs

but prescription appropriateness and monitoring
are fundamental

sssac.it



Podcast



SSSAC
PILLOLE ALGOLOGICHE