34TH ANNUAL MEDICAL SEMINAR ON WORKERS' COMPENSATION

BENEFITS OF OPIOIDS FOR PAIN MANAGEMENT

DAVID S. ROGERS, M.D.
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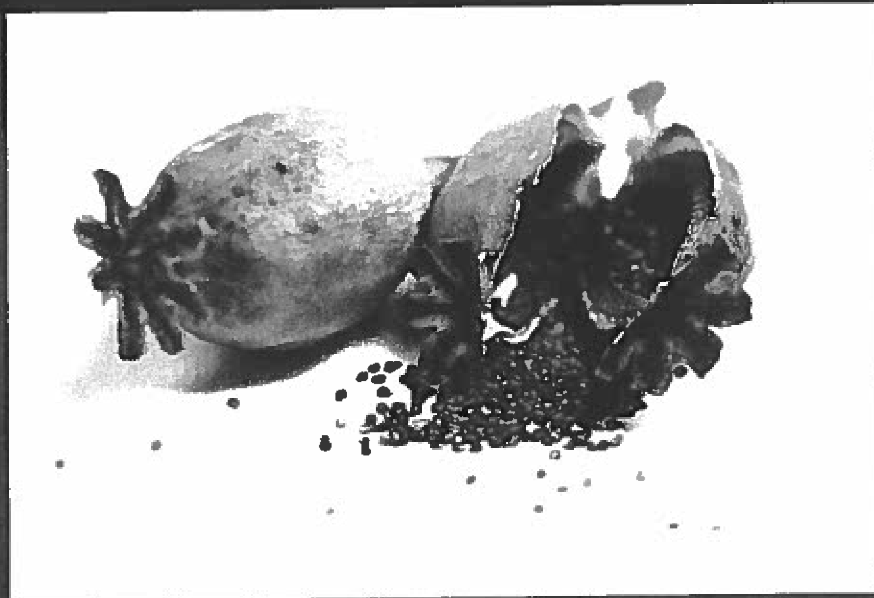


February 24 – 26, 2013 Francis Marion Hotel, Charleston, SC

BENEFITS OF OPIOIDS FOR PAIN MANGEMENT

DAVID S. ROGERS, M.D.

PAIN PREVALENCE

- 100 million adults in the U.S.
- 31 % of the adult population
- 34 % female adults
- 27 % male patients
- 26 % of adults in the U.S. with depression

N.I.H.

UNDERTREATMENT OF PAIN

- 42% E.D. patients present with pain
- 75 % leave the E.D. in mod-severe pain
- 40% never receive analgesics
- 86% patients after surgery report mod-to severe pain

CONSEQUENCES OF UNTREATED PAIN

- "Unrelieved pain has negative physical and psychological consequences. Aggressive pain prevention and control that occurs before, during, and after surgery can yield both short-term and long-term benefits."
  - AHCPR Clinical Practice Guidelines- Acute Pain Management
- "Unrelieved pain has enormous physiological and psychological effects on the patient. The Joint Commission believes that effective management of pain is a crucial component of good care. Research clearly shows that unrelieved pain can slow recovery, create burdens for patients and their families, and increase costs to the health care system."
  - Dennis O'Leary, M.D. President, JCAHO

PAIN

- WEBSTER'S Definition of PAIN

- A: a state of physical, emotional, or mental lack of well-being or physical, emotional, or mental uneasiness that ranges from mild discomfort or dull distress to acute often unbearable agony, may be generalized or localized, and is the consequence of being injured or hurt physically or mentally or of some derangement of or lack of equilibrium in the physical or mental functions (as through disease), and that usually produces a reaction of wanting to avoid, escape, or destroy the causative factor and its effects.

  B : a basic bodily sensation that is induced by a noxious stimulus, is received by naked nerve endings, is characterized by physical discomfort (as pricking, throbbing, or aching), and typically leads to evasive action.

OPIOID DEFINITION

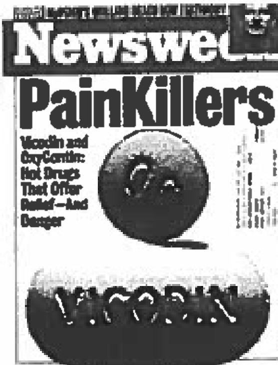
- 1. any synthetic narcotic that has opiate-like activities but is not derived from opium.
- 2. any of a group of naturally occurring peptides, e.g., enkephalins, that bind at or otherwise influence opiate receptors, either with opiate-like or opiate antagonist effects.

MOST WIDELY PRESCRIBED DRUG CLASS

- 1 OPIOIDS
- 2 ANTIDEPRESSANTS
- 3 LIPID AGENTS

- NIH – NIDA data
- Science Daily April 6, 2011

This sort of press is a direct consequence of our refusal to take a hard, responsible, unbiased view of these very strong, very problematic, and potentially deadly compounds



The 2003 APS Abstract Database
Perform a new search

TREATMENT APPROACHES
(Medical/Interventional)
D04 - Cancer Pain: Opioids
Poster #854

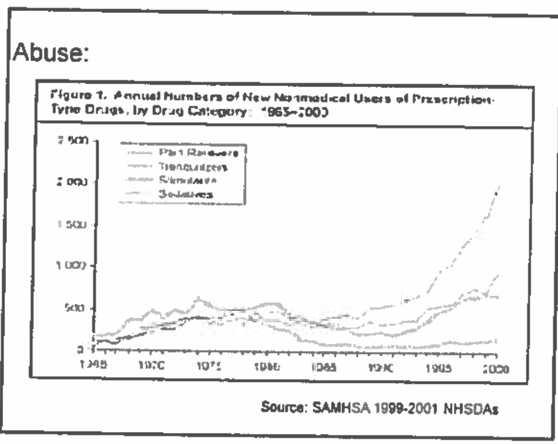
Fear of addiction and side effects continue to influence patients' decisions whether or not to follow analgesic regimens

Authors: [illegible], S. Cantor, [illegible], [illegible] Cleeland, The University of Texas MD Anderson Cancer Center, Houston, TX

Fear of addiction as well as side effects associated with opioid analgesics have been identified as major barriers to the management of cancer pain. Extensive research has examined the impact of these barriers on the public, patients, and providers. However, few studies have addressed the use of clinical decision making to determine what types of barriers influence patients' decisions about whether to follow prescribed analgesic regimens. The purpose of this study was to describe the concerns that patients had about using opioid analgesics for cancer related pain and the impact of these concerns on treatment outcomes.

OPIOID CONCERNS

- Physical dependence
- Psychological dependence
- Addiction
- Abuse
- Diversion



ABUSE AND ADDICTION

- Rare as a rule in chronic pain patients
- <u>but</u> …no appropriate studies of chronic pain populations over long term.

Important Questions

- Risk:Benifit (Efficacy) ratio?
- Abuse and Addiction?
- Tolerance?
- Psychological Risks?
- Cognitive Risks?
- Palliation vs. Rehabilitation?

Adverse Events (PDR)

- Body as a Whole:
  - [illegible]
- Cardiovascular:
  - [illegible]
- Central Nervous System:
  - [illegible]
- Endocrine:
  - [illegible]
- Gastrointestinal:
  - [illegible]
- Blood & Lymphatic:
  - [illegible]
- Metabolic & Nutritional:
  - [illegible]
- Musculoskeletal:
  - [illegible]
- Respiratory:
  - [illegible]
- Skin and Appendages:
  - [illegible]
- Special Senses:
  - [illegible]
- Urogenital:
  - [illegible]

OPIOID FACTS

USED TO TREAT MODERATE TO SEVERE PAIN

USED FOR ACUTE AND CHRONIC PAIN

SAFE AND EFFECTIVE WHEN USED CORRECTLY

CAUSE LESS LONG-TERM DAMAGE TO BODY SYSTEMS THAN FROM OTHER DRUG GROUPS

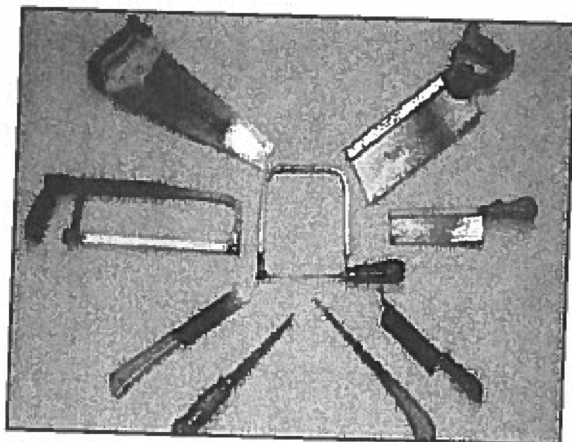
ARE OPIOIDS REALLY NECESSARY?

Unfortunately, Opioids are clearly not the Panacea we had hoped; they are merely another set of tools, with substantial risk, mortality and morbidity

OPIOIDS FOR CHRONIC NON-CANCER PAIN: A META-ANALYSIS OF EFFECTIVENESS AND SIDE EFFECTS

- BOTH WEAK AND STRONG OPIOIDS OUTPERFORMED PLACEBO FOR PAIN AND FUNCTION OUTCOMES
- PAIN RELIEF WAS SUPERIOR WITH STRONG OPIATES COMPARED TO OTHER NON-OPIATE MEDICATIONS
- REDUCTIONIN PAIN INTENSITY WAS APPROXIMATELY 30%

- Furlan, Sandoval, Mailis-Gagnon, Tunks
- Canadian Medical Journal May 23, 2006 vol. 174 no. 11 1589-1594



LIST OF MEDICATIONS I WILL NOT PRESCRIBE

- PROPOXYPHENE COMPOUNDS
- MEPERIDINE
- HYDROMORPHONE IR
- BUTALBITAL COMPOUNDS
- METHADONE
- NALBUPHINE
- CARISOPRODOL
- BUTORPHANOL
- PENTAZOCINE
- CODEINE

Methadone Grows as Killer Drug

PORTLAND, Me. — Methadone, [illegible]

[illegible]

"[illegible] Florida Office of Drug Control. [illegible]"

In North Carolina, [illegible]

In Maine, methadone [illegible] the deaths. In the first six months of last year,

The New York Times

Lack of analgesic effect of opioids on neuropathic and idiopathic forms of pain

[illegible] and B.A. Meyerson

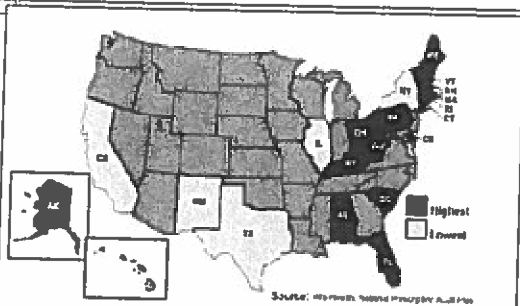
Summary [illegible]

FOOD FOR THOUGHT

- WE SHOULD ALL RECOGNIZE THAT THERE IS A NATIONAL PROBLEM WITH DRUG USE OF ALL TYPES

CAFFEINE
NICOTINE
ETHANOL

DIVERSION HOTSPOTS



PROHIBITION

- EASY SOLUTION

OR

- RECIPE FOR DISASTER?

PHYSICIANS FOR RESPONSIBLE OPIOID PRESCRIBING - PROP

PROPOSES MAXIMUM DAILY DOSE EQUIVALENT OF 100 MG. MORPHINE FOR NON-CANCER PAIN

MAXIMUM DURATION OF CONTINUOUS DAILY USE FOR NON-CANCER PAIN OF 90 DAYS

RUSSELL PORTNOY, M.D.

- OPIOID THERAPY
- FOR CHRONIC NON-MALIGNANT PAIN
- Journal of Law, Medicine, and Ethics
- 24 November, 1996 296-309
-

"If you insist on regulation, then you are consigning my mother to live in chronic pain."

Wall Street Journal 17 December, 2012

LYNN WEBSTER, M.D.

President of AAPM

- "We believe that the adoption of the recommendations in the PROP petition to lower doses or duration would provide a false sense of security for patients and practitioners."
- "In our view, a more effective means to address this problem would be enhanced prescriber education, and adherence to principles of practice, including ongoing monitoring for aberrant behaviors and early signs of addiction."
- Salem News.com Aug. 26, 2012

Steve Passik, P.h.D

Professor of Anesthesiology, Vanderbilt University

- "I am not pro-opioid, I am anti B.S."
  "In pain management, no exposure of anyone at all means cutting off an avenue to relief for a subset of patients with pain that might otherwise do well. Safe opioid prescribing is the result of assessing the vulnerabilities in highly stressed people and accommodating the delivery of opioid therapy to them. We need to stop blaming the drugs..."
- www.reportingonhealth.org/2012/08/30

Pressure to Treat Pain*

- JCAHO Regulations
  - Pain must be monitored and treated appropriately.
  - Patients have "right" to pain relief.
- Patient Advocates and Rights Groups
  - Demand opioids for benign pain.
  - Patient's Bill of Rights in many states.
- Litigation for Failure to Treat Pain
  - $1.5 million largest judgment to date.
  - 18 suites in 11 states pending.
  - Goal of winning a case in every state.

*** The implication being "treating pain"=Opioids**

The rock and the hard place

- More pressure to prescribe opioids
- Lawsuits against physicians for not prescribing
- Lawsuits against physicians for prescribing
- Criminal charges against physicians for patient diversion and abuse
- Individual and Class Action suits against physicians for addiction / dependence
- Individual and Class action suits for death (usually accidental overdose)
- Individual suits for Accidents under the influence (usually MVA)

amednews.com

PROFESSIONAL ISSUES

Florida physician guilty of manslaughter in OxyContin case

As word of the verdict in the OxyContin-related case spreads, experts worry doctors will shy away from pain management.

[illegible]

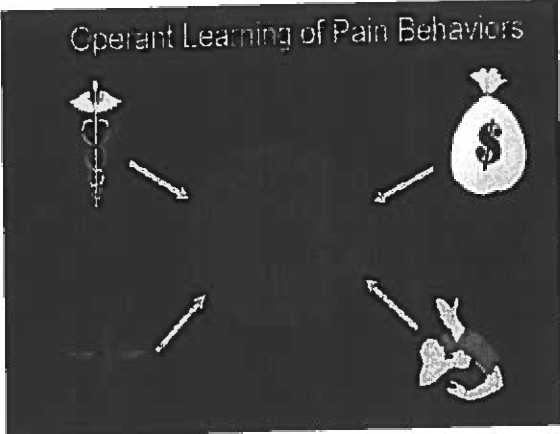
[illegible]

[illegible]

[illegible]

ANESTHESIOLOGIST WINS DISABILITY BENEFITS FOR OPIOID ADDICTION

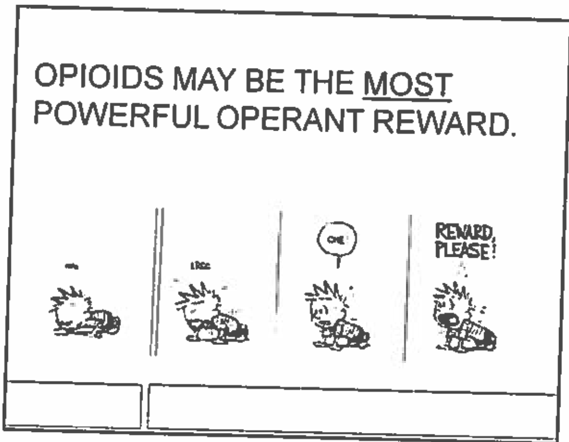
- Julie Colby vs. Union Security Insurance Co.
- Exclusion of the risk of drug abuse relapse was ruled an unreasonable interpretation of the insurance plan's coverage by the federal district court.
- Business Insurance 18 January, 2013



Operant Issues

Work Comp	54%
3rd Party Lawsuit	17%
Litigation Total	71%
IME'S	23%

OPIOIDS MAY BE THE MOST POWERFUL OPERANT REWARD.



INJURED WORKERS AND THE RISK OF NARCOTICS MISUSE

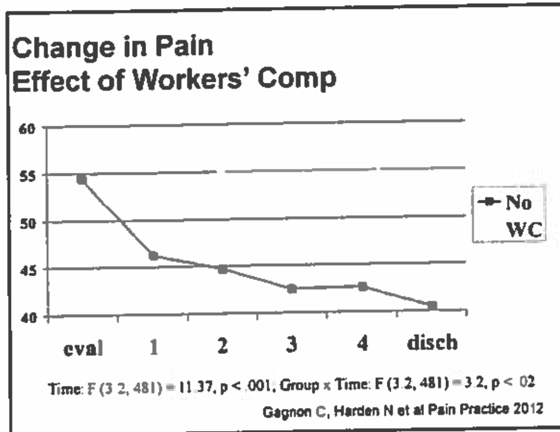
- 1 in 12 injured workers started on narcotics were still using them 3-6 months later
- Only 4-7% of injured workers with long-term narcotics use received psychosocial evaluation and treatment
- In the best state studied only 25% received such care
- Data based on 300,000 W/C claims in 21 states

- Worker's Compensation Research Institute 2012

EARLY OPIOID PRESCRIPTION AND SUBSEQUENT DISABILITY AMONG WORKERS WITH BACK INJURIES

- Opioid use was a risk factor for long-term disability at 1 year
- 14% (254 of 1843) received work disability compensation at 1 year
- Franklin, Stover, Turner, et al.
- Spine Jan. 2008 -vol.33 (2) 199-204

Change in Pain Effect of Workers' Comp



Time: F (3.2, 481) = 11.37, $p < .001$, Group x Time: F (3.2, 481) = 3.2, $p < .02$

Gagnon C, Harden N et al Pain Practice 2012

COSTS AND POOR COMPLIANCE WITH BEST PRACTICES

1.4 BILLION DOLLARS SPENT ON NARCOTICS ANNUALLY BY EMPLOYEES AND INSURERS
- 25% OF W/C EXPENSES

ONLY 1 IN 20 PHYSICIANS COMPLIED WITH BEST PRACTICES
- RISK ASSESSMENT
- SIGNED OPIOID AGREEMENT
- OBTAINED RANDOM UDSI

TEXAS, MASSACHUSETTS, AND NEW YORK HAVE ESSENTIALLY BANNED PHYSICIAN DISPENSING BY GREATLY LIMITING THEIR ABILITY TO DO SO

Jospeh Paduda, President of CompPharma LLC

OPIODS IN THE WORKPLACE

AMERICANS WITH DISABILITIES ACT AND DRUG ADDICTION TREATMENT ACT PASSED CONGRESS IN 2000

- Determined opioid addiction as a medical condition
- Encourage employers to support employees with opioid dependency

35 year-old Female with CLB on 20mg sustained release oxycodone BID
and several doses of immediate release "rescue" morphine a day.

Each Attempt to decrease opioids fail.

Vocation: School Bus Driver.

RTW Decision?

THE REAL OPIOID DILEMMA

- More pressure to prescribe opioids
- Lawsuits against physicians for not prescribing
- Lawsuits against physicians for prescribing
- Criminal charges against physicians for patient diversion and abuse
- Individual and Class Action suits against physicians for addiction / dependence
- Individual and Class action suits for death (usually accidental overdose)
- Individual suits for Accidents under the influence (usually MVA)

WHAT AMERICANS WANT AND EXPECT FROM HEALTH CARE

- Cure
- Instant gratification
- Surgery
- Pills
- High tech solutions
- No effort in their recovery

= Unrealistic goals in pain management

WHAT DOES NOT WORK*

- PROHIBITION
- NERVE BLOCKS*
- PAIN PUMPS*
- SPINAL CORD STIMULATORS*
- SURGERY*

- * FROM A COST/BENEFIT STANDPOINT

WHAT DOES NOT WORK*

- NERVE BLOCKS - $25-$100K per year for sometimes endless series of injections
- SURGERY- $25-$200K for spinal surgery
- IMPLANTS- $45-60K with up to $1000/month maintenance (replacement in 4 years)

*essentially no evidence at all to support these procedures

Harden – Pain Medicine 2012;(13) 987-988

What doesn't work cont;
Interventional Pain Management*

- Nerve Blocks
- Nerve Ablations
- Spinal Cord Implants
- Cortical Simulation
- Ketamine Coma
- Dead Rooster Comb Injections

*essentially no evidence to support any of these procedures
Harden -Pain Medicine Vol.13(3) 196-197

WHAT NOW?

- DO THE NECESSARY RESEARCH TO ANSWER THE OUTSTANDING QUESTIONS
- EDUCATE PHYSICANS AND PATIENTS ABOUT RISKS
- RISK MITIGATION STRATEGIES
- ESTABLISH A RATIONAL PAIN MANAGEMENT POLICY NATIONALLY
- DISCUSS WHO ARE THE MOST APPROPRIATE PROVIDERS FOR CHRONIC PAIN MANAGEMENT

WHAT DOES WORK?

- MULTIDISCIPLINARY APPROACH
- PSYCHIATRIC SUPPORT
  - Cognitive Behavioral Therapy
- RATIONAL POLYPHARMACY
- WORK HARDENING PROGRAMS
- RISK MITIGATION STRATEGIES

PT

VOC

OT

PATIENT

RT

MD

PSYCH

Efficacy of multidisciplinary pain treatment centers: a meta-analytic review

Herta Flor, Thomas Fydrich and Dennis C. Turk

Interdisciplinary Team Model

- Patient Centered
- Team members work together toward a common goal
- Make collective therapeutic decisions
- Communicate and consult with other team members, facilitated by planned face-to-face meetings
- Teams possess a combination of skills that no single individual demonstrates alone
- Team is able to achieve more than the sum of the individuals involved

Boon H, et al. *BMC Health Services Research* 2004,4:15 ; Cummings I. The interdisciplinary team. In: Doyle D, Hanks GW, MacDonald N, editors. Oxford textbook of palliative medicine. Oxford Oxford University Press, 1998 ; Parker GM. Cross-functional teams, working with allies, enemies and other strangers. San Francisco Jossey-Bass Publishers, 1994,7:31-40.

MULTIDISCIPLINARY PAIN CENTERS

- EFFECTIVE IN REDUCING PAIN AND OPIOID USE
- DECREASE HEALTH CARE SERVICES
- IMPROVE PATIENT FUNCTION
- EARLIER RETURN TO WORK
- CLOSING DISABILITY CLAIMS
- COST EFFECTIVE- ESPECIALLY WITH RECALCITRANT PATIENTS

- Drug Benefit Trends 2001; 13(9) 36-38

Physical Therapy

- De-emphasizing high tech, passive modalities
- Emphasizing low tech, self management and active modalities
- Reactivation
- Stretch/strengthen
- Tens units

Psychotherapy

- Cognitive behavioral therapy
- Stress management
- Coping skills
- Relaxation techniques
- Guided Imagery
- Self hypnosis

WORK HARDENING

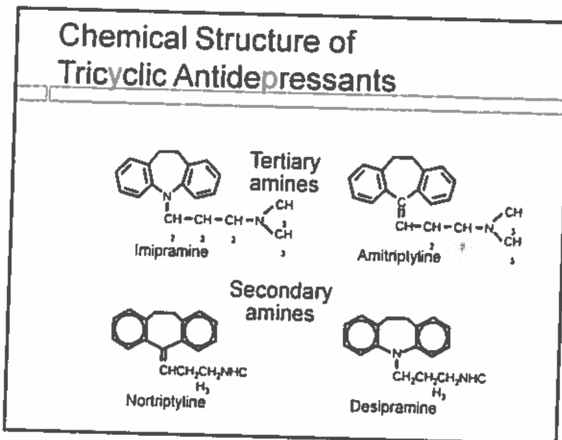
- EXAMINATION OF OUTCOMES IN DISABLED WORKER POPULATION
- SIGNIFICANTLY IMPROVED QUALITY OF LIFE
- UNLESS THERE WERE 2 OR MORE INJURIES
- MACK,et.al, Disability Medicine 2012,Vol.8 No.1 11-18

SCREENING TOOLS

- IDENTIFY ADDICTIVE POTENTIAL
- IDENTIFY DEPRESSION –BAD
- IDENTIFY PERSONALITY DISORDERS
- LIMITS RISK FOR BOTH PATIENT AND PHYSICIAN

RATIONAL POLYPHARMACY

- MULTIMODAL THERAPY
- USE OF OPIOIDS WITH OTHER MEDICATION CLASSES
- MULTIPLE RECEPTOR SITES
- 1 + 1 + 1 = 5



Anticonvulsant Drugs and Neuropathic Pain*

First-generation
- Carbamazepine[A]
- Divalproex sodium[B]
- Phenytoin[A]
- Valproic acid[B]
- Clonazepam[B]
- Phenobarbitol[B]

Second-generation
- Gabapentin[A]
- Lamotrigine[A]
- Levetiracetam[B]
- Oxcarbazepine[A]
- Tiagabine[B]
- Topiramate[B]
- Zonisamide[B]

[A]Published randomized controlled trials.
[B]Clinical anecdotes and/or published case series.

*Not approved by FDA for this use.

Anticonvulsants/ Neuromodulators

Mechanisms of Action	Drugs	
Na⁺ channel blocker	• Carbamazepine • Lamotrigine • Oxcarbazepine	• Phenytoin • Valproate • Zonisamide
Ca⁺⁺ channel blocker	• Ethosuximide • Oxcarbazepine	• Gabapentin • Zonisamide
GABA receptors	• Barbiturates	• Benzodiazepines
GABA metabolism	• Vigabatrin • Valproate	• Tiagabine • (Gabapentin)
Glutamate receptors	• Carbamazepine • Felbamate	• Lamotrigine • Topiramate
Glutamate metabolism	• (Gabapentin)	

Topical Medications

- Capsaicin
  - Inconsistent trial results; potential burning upon application
- EMLA
  - May help some patients with allodynia
- Clonidine gel
  - Pilot studies suggest efficacy; controlled trial in progress
- Unstudied custom compounds
  - Doxepin,
  - other TCAs, gabapentin, opioids, ketamine, guanethidine

  - Lidocaine/ Diclofenac Topical patches and gels

LONG ACTING OPIATES

- ARE MORE EXPENSIVE
- LESS PILL COUNT
- LESS OFF TIME - REBOUND PAIN AND ANXIETY
- LESS DIVERSION POTENTIAL
- LESS ABUSE POTENTIAL

NEW FORMULATIONS

- IN OPIOID DEPENDENT PATIENTS TAKING NEW FORMULATION OXYCONTIN
- ABUSE DECLINED 35.6% TO 12.8%
- 66% OF SUBJECTS REQUESTED A CHANGE TO ANOTHER MEDICINE

Cicero, NEJM 2012- 367: 187-189

OPIOID SUMMARY

USED TO TREAT MODERATE TO SEVERE PAIN

USED FOR ACUTE AND CHRONIC PAIN

SAFE AND EFFECTIVE WHEN **USED CORRECTLY**

CAUSE LESS LONG-TERM DAMAGE TO BODY SYSTEMS THAN FROM OTHER DRUG GROUPS