Evidence-Based Pain Medicine for Primary Care Physicians

> Mitchell Engle, MD, PhD 3 November 2018

Disclosures

• No relevant financial disclosures

• Equity: Cellarian Health

Pain Medicine: State of the Art 2010- The Texas Pain Society

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Why Write a Paper for PCP's

- PCP's see and treat the majority of pain
- Few review/best practice articles
- Need to emphasize evidence-based pain medicine
- Chronic pain is a rarely sufficiently taught during training



PCPs and Pain Management

Schedule II Opioid Claims By Provider Specialty **Family Practice** 161.115,312,091 Internal Medicine 122.0 12,785,839 55.0 Nurse Practitioner 4,081,282 57.4Physician Assistant 3,089,022 134.2 Orthopedic Surgery 2,622,297 Physical Medicine and Rehabilitation 348.2 2,314,358 484.2 Anesthesiology 2,120,474 Interventional Pain Management 1.124.9 2,097,975 **Emergency Medicine** 51.0 1,767,183 921.1 Pain Management 1,251,822 110.0 **General Practice** 988.926 203.3 Rheumatology 866,103 46.2 **General Surgery** 797,573 64.4 Neurology 785,381 8.4 Dentist 728,735 84.9 Hematology/Oncology 623,748 207.7 Geriatric Medicine 378,203 35.8 Urology 353,845 106.3 Neurosurgery 345,643 20.6 Podiatry 257,759 Claims Per Oral Surgery (dentists only) 51.2 252,329 27.1 Nephrology Provider 205,643 Medical Oncology 74.2 186,712 Total 8.4 Cardiology 185,092 Claims

15.3

100

Otolaryngology

JAMA Intern Med. 2016 February ; 176(2): 259–261.

10,000

136,418

1,000,000

100,000,000

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Special Communication

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

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



CLINICAL GUIDELINE

Noninvasive Treatments for Acute, Subacute, and Chronic Low Back Pain: A Clinical Practice Guideline From the American College of Physicians

Amir Qaseem, MD, PhD, MHA; Timothy J. Wilt, MD, MPH; Robert M. McLean, MD; and Mary Ann Forciea, MD; for the Clinical Guidelines Committee of the American College of Physicians*

Annals Int Med Feb 2017

Differences?

- Provides a theoretical framework for pain
- Prioritizes physical medicine and psychological therapy
- Provides realistic recommendations on pharmacotherapy
- Describes the role of procedural interventions
- Make recommendations on when to refer to a pain specialist

The Writers



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Evidence-based pain medicine for primary care physicians

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The Goals

The goal of this publication is to review the basic principles of pain medicine and provide <u>primary</u> <u>care providers</u> with a pragmatic and evidencebased approach to optimized assessment and treatment of patients with a variety of painful conditions.

Paper Sections

- History of Pain Medicine
- Biopsychosocial model
- Evaluation of the pain patient
- Therapeutics
 - Physical medicine
 - Psychological therapy
 - Pharmacological
 - Procedural interventions

What is Pain?

- Definition
 - Sensory
 - Affective
- Pain vs Suffering
- Biopsychosocial model of pain
- Inadequate unidimensional tools



Physical Medicine

- A vital component of any comprehensive pain treatment plan
- Passive physical modalities-heat, cold, TENS
- Therapeutic exercise
 - Importance of ACTIVE therapy
 - 30 min per day
 - Yoga, Tai Chi, aquatic aerobics, walking, weight training, stretching etc.
- "The preponderance of evidence indicates that physical therapeutics are both safe and evidence-based options for the treatment of pain. As such, they should be the centerpiece of any pain management program."

Pain Evaluation

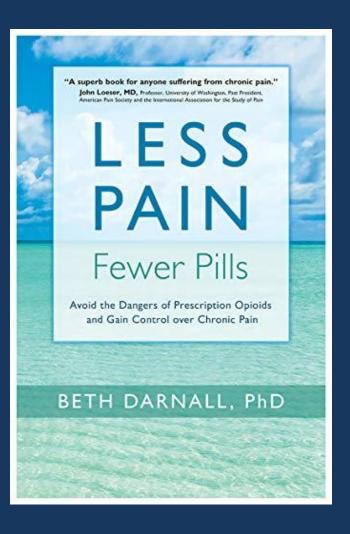
- Detailed history of the pain
- Past consultations, testing and treatment
- Review previous medical history
- Complete social history including mental health and substance use
- Physical examination
- Discussion of realistic outcomes
- Plan which includes diagnoses, goals, treatments, and re-evaluation.

Psychological Therapy

- The importance of psychological comorbidities
 - Risk factor for developing chronic pain
 - Associated with poor coping strategies, aberrant use of controlled substances, and failure to benefit from interventional procedures.
- Maladaptive coping mechanisms
 - Avoidance, catastrophizing, injustice, disability conviction, inability to accept one's pain
 - Fear avoidance correlate with functional disability more than pain intensity

Role of Pain Psychologist

- Psychologists improve pain outcomes
- Treatment
 - Psych comorbidities
 - Maladaptive coping
- MI and CBT



Pharmacology

- Acute vs Chronic Pain
- Musculoskeletal vs Neuropathic Pain
- Classes
 - NSAIDs
 - Muscle relaxants
 - TCA/SNRI
 - Membrane stabilizers
 - Topical LA
- Journal declined flowchart



The Opioid Dilemma

BUSINESS INSIDER

Pain doctors: Insurance companies won't cover the alternatives to opioids



HARRISON JACOBS AUG. 6, 2016, 6:04 PM



"Considering a trial of opioids is a critical step in clinical decision making. This step should

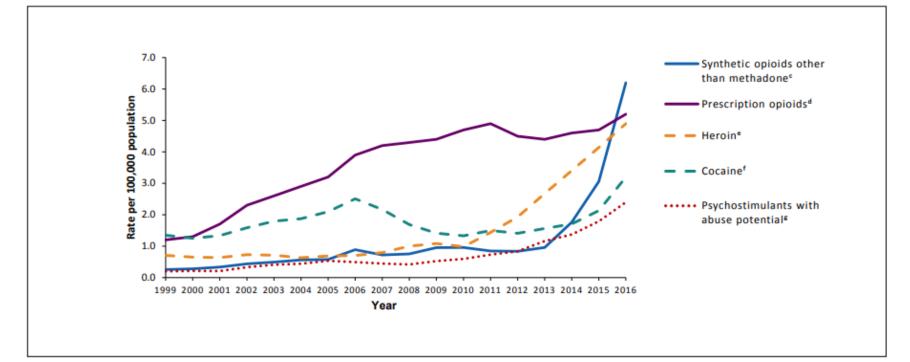
generally only be considered after multiple other therapies have failed and the patient is determined to have an appropriate risk profile using risk stratification techniques. Thus, given the significant risks associated with COT, this is an excellent time to consider referring the patient to a pain medicine specialist for a second opinion."

Annual Surveillance Report of Drug-Related Risks and Outcomes | United States

CDC National Center for Injury Prevention and Control | 2018



Age-adjusted rates^a of drug overdose deaths^b by drug or drug class and year — United States, 1999–2016



Special Communication

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

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

The "CDC Guideline for Prescribing Opioids for Chronic Pain—United States, 2016," is intended for primary care clinicians (eg, family physicians, internists, nurse practitioners, and physician assistants) who are treating patients with chronic pain (ie, pain conditions that typically last >3 months or past the time of normal tissue healing) in outpatient settings. The guideline is intended to apply to patients 18 years and older with chronic pain outside of active cancer treatment, palliative care, and end-of-life care. Some of the recommendations might be relevant for acute care settings or other specialists, such as emergency physicians or dentists, but use in these settings or by other specialists is not the focus of the guideline. JAMA 2016

Opioids

- Effectiveness of Chronic Opioid Therapy
 - Few studies > 12 weeks
 - No functional improvement
- Side effects: endocrinopathies, OIH, Central OSA, mood disorders
- Misuse and abuse
- Necessity of initial and continued risk stratification and monitoring
 - PMP
 - UDT

JAMA | Original Investigation

Effect of Opioid vs Nonopioid Medications on Pain-Related Function in Patients With Chronic Back Pain or Hip or Knee Osteoarthritis Pain The SPACE Randomized Clinical Trial

- Minneapolis VA
- Back and LE pain
- N = 240
- 1 yr data
- Extensive psychometric testing
- No improvement in 1 yr pain or function

Interventional Therapies

PERCUTANEOUS RADIO-FREQUENCY NEUROTOMY FOR CHRONIC CERVICAL ZYGAPOPHYSEAL-JOINT PAIN

PERCUTANEOUS RADIO-FREQUENCY NEUROTOMY FOR CHRONIC CERVICAL ZYGAPOPHYSEAL-JOINT PAIN

SUSAN M. LORD, B.MED., PH.D., LESLIE BARNSLEY, B.MED., PH.D., BARBARA J. WALLIS, B.SC., GREGORY J. MCDONALD, M.B., B.S., AND NIKOLAI BOGDUK, M.D., PH.D.

Lancet. 2016 Oct 1;388(10052):1408-1416. doi: 10.1016/S0140-6736(16)31341-1. Epub 2016 Aug 17.

Safety and efficacy of vertebroplasty for acute painful osteoporotic fractures (VAPOUR): a multicentre, randomised, double-blind, placebo-controlled trial.

Clark W¹, Bird P², Gonski P³, Diamond TH⁴, Smerdely P⁵, McNeil HP⁶, Schlaphoff G⁷, Bryant C⁸, Barnes E⁹, Gebski V⁹.



Pain Medicine 2010; 11: 1149–1168 Wiley Periodicals, Inc.

SPINE SECTION

Original Research Articles

The Efficacy of Transforaminal Injection of Steroids for the Treatment of Lumbar Radicular Pain Headache © 2010 American Headache Society doi: 10.1111/j.1526-4610.2010.01678.x Published by Wiley Periodicals, Inc.

Research Submissions

OnabotulinumtoxinA for Treatment of Chronic Migraine: Pooled Results From the Double-Blind, Randomized, Placebo-Controlled Phases of the PREEMPT Clinical Program



PAIN[®] 152 (2011) 481-487



www.elsevier.com/locate/pain

Research papers

Radiofrequency treatment relieves chronic knee osteoarthritis pain: A double-blind randomized controlled trial

Woo-Jong Choi^a, Seung-Jun Hwang^b, Jun-Gol Song^a, Jeong-Gil Leem^a, Yong-Up Kang^c, Pyong-Hwan Park^a, Jin-Woo Shin^{a,*}

RESEARCH-HUMAN-CLINICAL TRIALS

Comparison of 10-kHz High-Frequency and Traditional Low-Frequency Spinal Cord Stimulation for the Treatment of Chronic Back and Leg Pain: 24-Month Results From a Multicenter, Randomized, Controlled Pivotal Trial

What To Do With This Paper?

- Read it
- Share it with PCP colleagues
- Speak to local PA/NP groups and use it as a template
- Give it to medical students/residents
- Cite it



https://www.ncbi.nlm.nih.gov/pmc/articles/PMC5903506/pdf/ubmc-31-01-1400290.pdf

Texas Pain Foundation

- Established in October 2014
- 501c3 nonprofit charitable organization
- Concentrates on pain education and research
- Can accept unrestricted educational and research grants
- Cannot engage in lobbying
- Smile.amazon.com

– Donates 0.5% of Amazon.com order to TPFs

Questions?