Provider Perspective on the Use of Topical Pain Products

Committee to Assess the Available Scientific Data Regarding the Safety and Effectiveness of Ingredients used in Compounded Topical Pain Creams

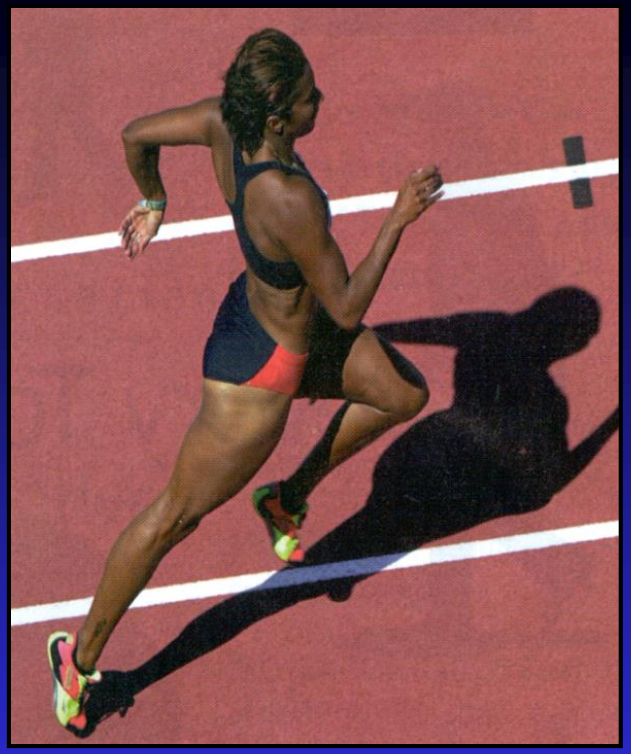
Washington, DC
May 20, 2019; 3:10-3:00pm

Robert J. Dimeff, MD
Texas Orthopaedic Associates
Team Physician Dallas Stars
Past President AMSSM

The National Academies of SCIENCES ENGINEERING MEDICINE

Introduction

- Traumatic injuries
  - Violent
  - Collision vs Noncollision
  - Fractures, Sprains, Strains



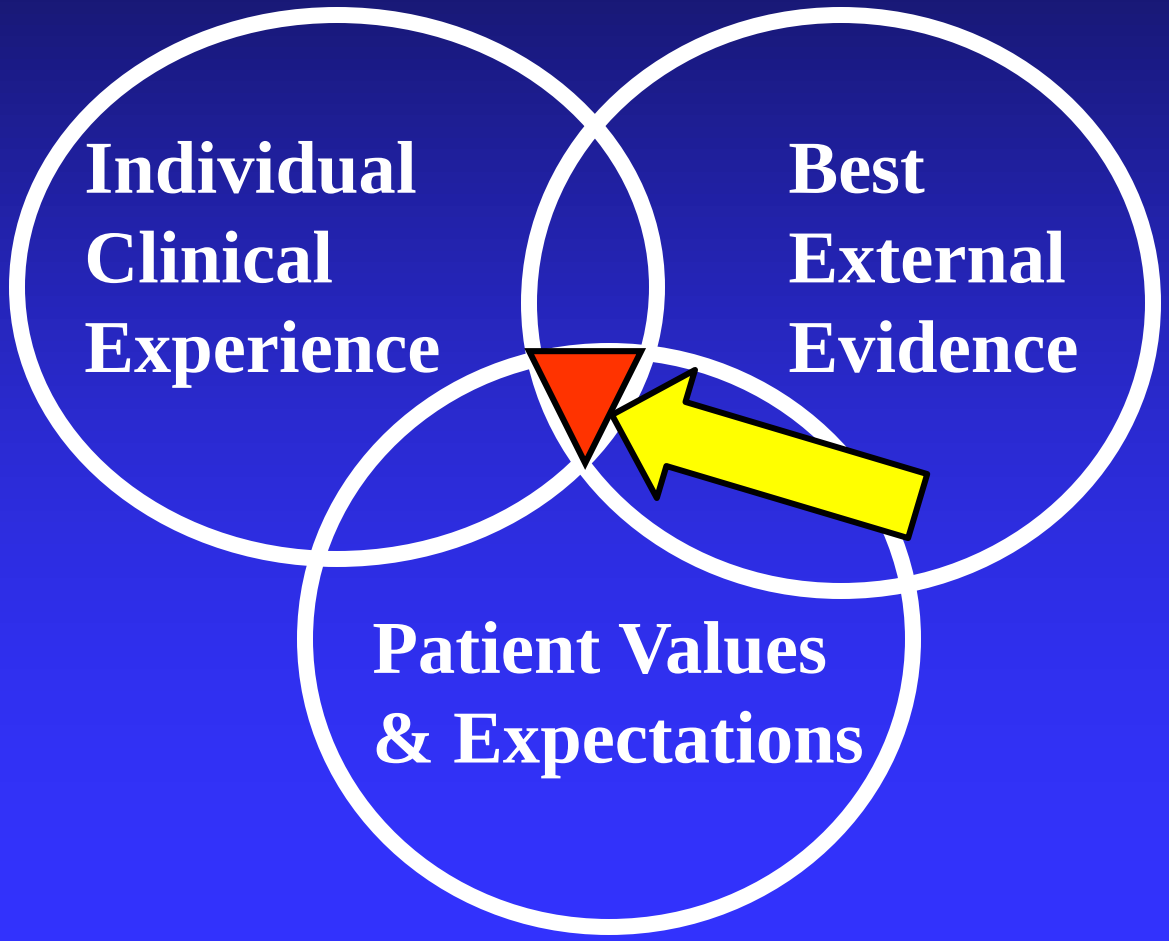
trau
Cho
end

Introduction
Evidence Based Medicine

- Stresses the importance of evidence derived from high quality clinical research rather than expert opinion and nonsystematic clinical observations *Gordon Guyatt 1990*
- The conscientious, explicit and judicious use of the "current best evidence" in making the best decision about the care of the individual patient *DL Sackett 1997*

Introduction

Evidence Based Medicine



Treatment Strategy

- Consider the differential diagnosis
- Myofascial pain and dysfunction of muscle
- Intra articular disorders
- Compensatory nerve entrapment not uncommon
- Paradigm shift: change tissue back to normal
- Maximize nonoperative, noninvasive, least expensive, least risk treatment; except for pros
- Painful, invasive, expensive treatments have a bigger placebo effect

Treatment Options

- Rehab exercises
- Fix underlying cause
- Behavioral modification
- Biomechanics & braces
- Moist heat
- Cryotherapy
- Electrical/Galvanic stim
- Ultrasound
- Laser
- RF ablation
- Dry needle/TPI
- Magnets
- Chiropractic
- ART/MAT
- Massotherapy
- Acupuncture

Treatment Options

- Diet & supplements
- Medications
- NTG patches
- Steroid injections
- Hyaluronic acid
- Shockwave therapy
- Prolotherapy
- Autologous blood
- Platelet rich plasma
- Amniotic tissue
- BMAC
- Fat derived “stem” cell
- Umbilical cord products
- Exosomes
- CBT/psych
- Prayer

Treatment Options

- Diet & supplements
- **Medications**
- NTG patches
- Steroid injections
- Hyaluronic acid
- Shockwave therapy
- Prolotherapy
- Autologous blood
- Platelet rich plasma
- Amniotic tissue
- BMAC
- Fat derived “stem” cell
- Umbilical cord products
- Exosomes
- CBT/psych
- Prayer

Pain Medication in Orthopedics

Administration

- Intravenous
- Inhalation
- Intramuscular
- Oral
- Rectal
- Transdermal
- Topical

Classes

- Narcotics
- Anesthetics/caines
- NSAIDS
- TCA
- SSRI/SNRI
- Neuroleptics
- Miscellaneous

Pain Medication in Orthopedics

Administration

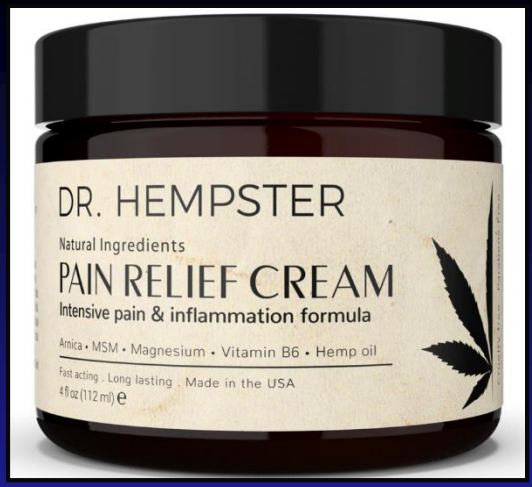
- Intravenous
- Inhalation
- Intramuscular
- Oral
- Rectal
- Transdermal
- **Topical**

Classes

- Narcotics
- Anesthetics/caines
- NSAIDS
- TCA
- SSRI/SNRI
- Neuroleptics
- Miscellaneous

Topical

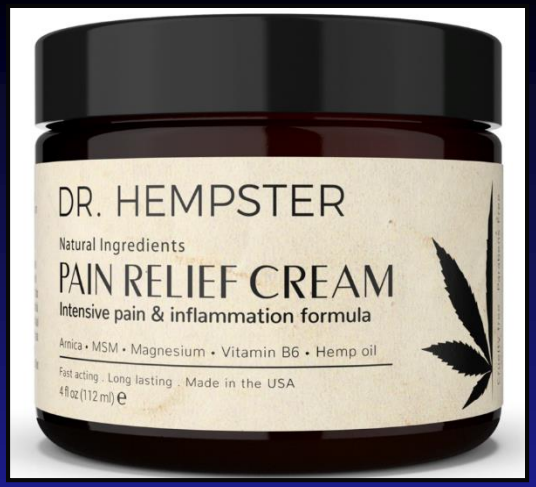
- OTC
- NSAIDS
- Rx
- Compounded



Composition (100 g Ointment contain)	Ø	
Arnica Montana	D2	1,5 g
Calendula officinalis	Ø	0,45 g
Hamamelis virginiana	Ø	0,45 g
Echinacea angustifolia	Ø	0,15 g
Echinacea purpurea	Ø	0,15 g
Chamomilla recutita	Ø	0,15 g
Symphytum officinale	D4	0,1 g
Bellis perennis	Ø	0,1 g
Hypericum perforatum	D6	0,09 g
Achillea millefolium	Ø	0,09 g
Aconitum napellus	D1	0,05 g
Atropa belladonna	D1	0,05 g
Mercurius solubilis Hahnemanni	D6	0,04 g
Hepar sulfuris	D6	0,025 g

Topical

- OTC
- NSAIDS
- Rx
- **Compounded**



Composition (100 g Ointment contain)	Ø	
Arnica Montana	D2	1,5 g
Calendula officinalis	Ø	0,45 g
Hamamelis virginiana	Ø	0,45 g
Echinacea angustifolia	Ø	0,15 g
Echinacea purpurea	Ø	0,15 g
Chamomilla recutita	Ø	0,15 g
Symphytum officinale	D4	0,1 g
Bellis perennis	Ø	0,1 g
Hypericum perforatum	D6	0,09 g
Achillea millefolium	Ø	0,09 g
Aconitum napellus	D1	0,05 g
Atropa belladonna	D1	0,05 g
Mercurius solubilis Hahnemanni	D6	0,04 g
Hepar sulfuris	D6	0,025 g

Compounded Topicals

Compounded Topicals
Ingredients

- NSAIDS - keto, ibupr, piroxicam, diclofenac
- Relaxants - cyclobenz, baclofen, guafenasin
- Vasodilate - nifedipine, verapamil
- Pain blockers - ketamine, opiates, caines
- Neuro - amitriptyline, gabapentin
- Misc - capsaicin, menthol, clonidine, filler
- Carrier - lipoderm gel, PLO cream

Compounded Topicals
Personal Use in Sports Medicine

- Have recommended for chronic MSK disorders
- Most … ibe
  - Re… dence
- Do t… etter than …

Compounded Topicals
Efficacy

- N=133 Neuro, Nocioceptive, Mixed Lido+
  - N=ketamine, gabapentin, clonidine
  - No=ketoprofen, baclofen, cyclobenzaprine
  - M=keta, gaba, dicflofenac, bac, cyclob
- 36% vs 28% decrease in pain (≥ 2) at 30 days


Annals of Internal Medicine®

Compounded Topical Pain Creams to Treat Localized Chronic Pain: A

Robert E. Brutcher, PharmD, PhD; Connie Kurihara, RN; Mark C. Bicket, MD; Parvaneh Moussavian-Yousefi, PharmD; David E. Reece, MD; Lisa M. Solomon, BS; Scott R. Griffith, MD; David E. Jamison, MD; Steven P. Cohen, MD

Compound pain creams are not better than placebo cream, and their higher costs compared to approved compounds should curtail routine use

Compounded Topicals
Personal Use in Sports Medicine

- Have recommended for chronic MSK disorders
- Most physicians don't know how to prescribe
  - Rely on industry to recommend with little evidence
- Do they work? Efficacy less than, equal, better than other delivery systems?
  - Application method is therapeutic

Compounded Topicals
Personal Use in Sports Medicine

- Safer than other deliver systems?
  - Source, purity, contaminants, production, control, derm issues, dose and frequency concerns
- Less expensive?
  - $100s to $1000s per tube charged to insurance
- Not better results than other topical agents

As a result, namely efficacy and expense, I have curtailed my use of compounded topicals

Thank You