

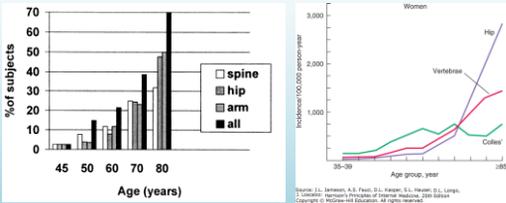
Managing Pain in the Elderly

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The Pain Deck is Stacked Against the Elderly



Osteoporosis Fractures

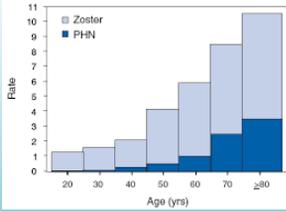


Age (years)	spine (%)	hip (%)	arm (%)	all (%)
45	2	1	1	1
50	5	3	3	3
60	15	10	10	10
70	25	15	15	15
80	40	25	25	25

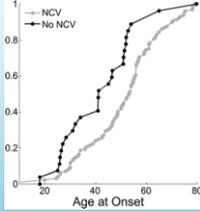
Age group, year	Hip	Vertebrae	Collar
35-39	100	100	100
40-44	200	200	200
45-49	400	400	400
50-54	800	800	800
55-59	1200	1200	1200
60-64	1800	1800	1800
65-69	2500	2500	2500
70-74	3500	3500	3500
75-79	4500	4500	4500
80-84	5500	5500	5500
85-89	6500	6500	6500
90-94	7500	7500	7500
95-99	8500	8500	8500

Source: J.L. Jensen, A.E. Fesli, D.L. Kaplan, L.S. Rosen, G.J. Longo. Lumbosacral Fractures: Prevalence of Osteoporosis. JAMA 1994; 271:1888-1892. Copyright © McGraw-Hill Education. All rights reserved.

Zoster & PHN



Trigeminal Neuralgia



Verne



- 81-year-old veteran with PD and type 2 DM; he has burning and shooting pain in both feet; his joints ache—especially his hips and knees; pain is bad at night, but can flare up first thing in the morning and also when he walks any distance
- He was widowed in the past year and moved to an assisted living apartment; he has fallen a few times, sustaining soft tissue injuries, but no fracture
- Ibuprofen and acetaminophen with codeine were ineffective; hydrocodone/APAP made him confused and constipated
- Oxycodone is better-tolerated and he is taking about 8-10 tablets a day. "Doc, it doesn't do that much— just takes the edge off; but it's all I've got. It helps me so I can relax and sleep. Can we move the dose up a little?"
- He jokes, "Otherwise, you might as well put me in the pine box right now"

DM=diabetes mellitus. PD=Parkinson's disease
APAP=acetaminophen

Verne's Examination



- Jovial affect discordant with his depressed mood
- Gait is shuffling and wide-based with postural instability
- Joint deformities in the hands and knees consistent with OA
- Sensory loss to pin and vibration in the feet and distal legs; positive Romberg sign; absent DTRs at the Achilles tendons; feet are sensitive to light touch

Making a Pain Assessment that Guides Treatment Choices

- Pain intensity and impact measures
- Pain physiologic types
- Contributing factors
- Barriers
- Disease burden

Self-Report

- 0-10 NRS
- Faces scales
- Mild-Moderate-Severe
- Pain or No Pain



Functional Pain Assessment

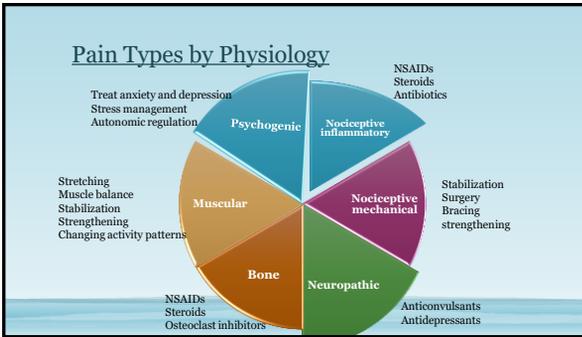
- How much does pain interfere with...
- Transferring
- ADLs
- Activity
- Socializing

PAINAD Scale

Table 2: Pain Assessment in Advanced Dementia (PAINAD)

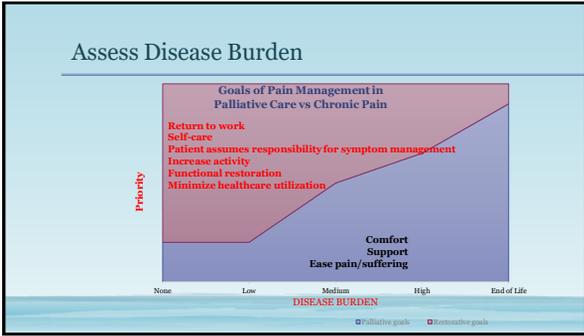
Items	0	1	2	SCORE
Breathing (Independent of vocalization)	Normal	Occasional labored breathing. Short period of hyperventilation.	Noisy labored breathing. Long period of hyperventilation. Cheyne-stokes respirations.	
Negative vocalization	None	Occasional moan or groan. Low level of speech with a negative 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				

Pain Types by Physiology



Contributing Factors and Barriers

- **Contributing factors** amplify or perpetuate pain
 - Depression or anxiety
 - Posture
 - Intercurrent illness
- **Barriers** interfere with pain assessment or with implementing appropriate treatment
 - Insurance non-coverage/resource access
 - Low motivation
 - Personality disorder
 - Chemical dependency
 - Language or communication difficulty
 - Conflicting medical therapies



Verne's Case Formulation

- Painful diabetic polyneuropathy
- Muscular dysfunction/pain due to PD
- Joint pain (inflammatory) due to OA

- Contributing factors:
 - Grief and loss
 - Depression
 - Bradykinesia
- Barriers
 - Bradykinesia
 - Risk of falls
 - Intolerance to some analgesics with reliance on oxycodone
- Disease burden; fairly high—take a mixed rehabilitative and palliative approach

BEERS Criteria

Medication	Recommendation	Rationale
NSAID	Avoid	GI, renal, HTN
Muscle relaxants	Avoid	CNS ADR
TCAs	Avoid	Orthostasis, Antichol, Arrhythmia
Benzodiazepines	Avoid	Resp dep, CNS, interact
Opioids	Avoid except acute severe	Resp dep, CNS, constip
Gabapentin/pregabalin	Avoid with opioid or benzo	Increased OD risk

Tricks of the Trade

- Topical agents
- Gabapentin dosing
- Opioids
- Complementary therapies

Topical Agents

- Diclofenac 1% gel and 1.3% patch
- Ketoprofen gel (compounded to 10%)
- Gabapentin gel (compounded to 8%)
- Lidocaine patch or ointment (4%-5%)
- Morphine 0.1% wgt-wgt in Intrasite gel

Pressure Ulcer on Coccyx
Treated with Topical Morphine



Gabapentin Renal Dosing

- 20% of the creatinine clearance in mg per day
- Pregabalin dosing = 10% of CrCl in mg per day
- In Dialysis pts give post dialysis

Opioids

- Tramadol
 - Much less respiratory depression
- Buprenorphine patch
 - 7 day patch 5, 10, 15, 20 mcg/hr
 - Much less resp depression
- Avoid morphine in elderly due to M-3-G

Complementary Therapies

- Acupuncture
- Massage
- Movement-based
 - Tai Chi
 - Yoga
 - Xi Gong



Complementary Therapies in Clinical Practice
 Volume 22, February 2018, Pages 87-92
 ELSEVIER

Knee osteoarthritis pain in the elderly can be reduced by massage therapy, yoga and tai chi: A review
 Tiffany Fields MD

Mayo Clin Proc. 2016; 91(9):1292-1306
 Evidence-Based Evaluation of Complementary Health Approaches for Pain Management in the United States
 Richard L. Nahin, PhD, MPH; Robin Bonneau, PhD, PA; Parag S. Khata, DC, PhD; Barbara J. Skuman, BA; and Wendy J. Weber, ND, PhD, MPH

From the National Center for Complementary and Integrative Health, National Institutes of Health, Bethesda, Maryland (R.L.N.); Center for Health Systems Research and Analysis, Mayo Clinic, Rochester, Minnesota (R.B.); Department of Integrative Health, University of Michigan, Ann Arbor, Michigan (P.S.K.); Department of Integrative Health, University of Michigan, Ann Arbor, Michigan (W.J.W.); and Department of Integrative Health, University of Michigan, Ann Arbor, Michigan (B.J.S.).

Selecting Complementary Therapies Based on Diagnosis

Migraine	DJD	Fibromyalgia	Back/neck pain
Biofeedback	Acupuncture	Tai Chi	Spinal manip
Neutraceuticals	Glucosamine chondroitin	Relaxation	Acupuncture
Acupuncture	Yoga	Acupuncture	Massage

American Pain Society
 RESEARCH EDUCATION TREATMENT ADVOCACY
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Critical Review

Effects of Yoga Interventions on Pain and Pain-Associated Disability: A Meta-Analysis

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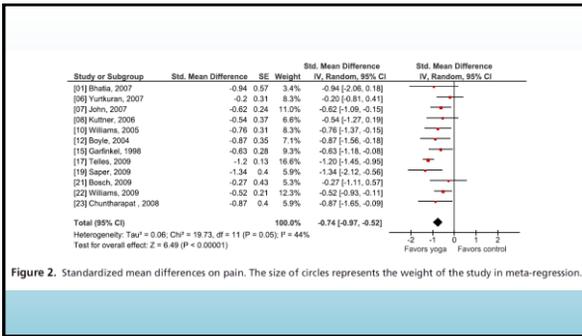


Figure 2. Standardized mean differences on pain. The size of circles represents the weight of the study in meta-regression.

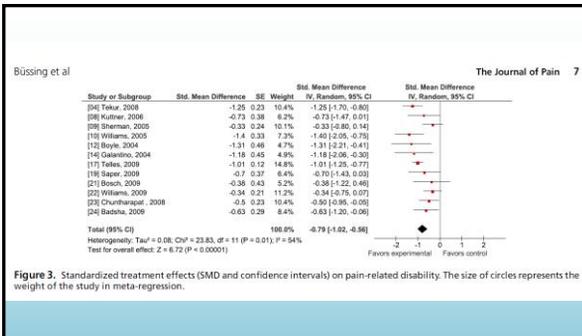
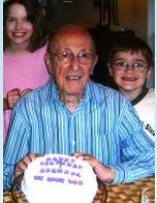


Figure 3. Standardized treatment effects (SMD and confidence intervals) on pain-related disability. The size of circles represents the weight of the study in meta-regression.

Verne's Plan of Care



- Gabapentin for DPNP (renal dose)
- Taper oxycodone by one tab per day each week
- Consider tramadol or Buprenorphine patch for its opioid effect as well as SNRI
- Encourage wheeled walker to prevent falls
- Optimize Parkinson's management for mobility
- Topical Diclofenac for joint pain
- Warm pool or other movement Therapy for OA and social benefit

- Doing much better
- Has a girlfriend
- "I have things to live for"

