Oh, My Aching Back

Alan Dow, MD, MSHA, FACP
Virginia Commonwealth University
I have no disclosures.
Question

A 44 year old man presents with back pain. He notes he has occasionally had back soreness throughout his life, but, last weekend, he went to a trampoline park with his kids and, after bouncing around, has had worse soreness than usual that has interfered with his sleep and taken longer to resolve. He denies fever, weight loss, or neurological symptoms. What non-pharmacologic therapy has the best evidence for his acute pain?

1) Heat
2) Massage
3) Acupuncture
4) Spinal manipulation
5) Exercise
Answer

1) Heat
2) Massage
3) Acupuncture
4) Spinal manipulation
5) Exercise
Low back pain

• 25% of the population quarterly
• Driver of healthcare costs and lost productivity
• Most (>2/3) resolves in one year

Non-pharmacologic therapy of acute back pain:
Heat

- Moderate benefit
- Moderate strength of evidence
Non-pharmacologic therapy of acute back pain:
Massage
• Moderate 1 week benefit
• No 5 week benefit
• Low strength of evidence
Non-pharmacologic therapy of acute back pain: Acupuncture

- Low benefit
- Low strength of evidence
Non-pharmacologic therapy of acute back pain: Spinal Manipulation

- No benefit
- Low strength of evidence
Non-pharmacologic therapy of acute back pain:

Exercise

- No benefit
- Low strength of evidence
- 6 RCTs
Question

For this patient, what pharmacologic therapy has the best evidence for his acute back pain?

1) Corticosteroids
2) Acetaminophen
3) Muscle relaxants
4) NSAIDs
Answer

1) Corticosteroids
2) Acetaminophen
3) Muscle relaxants
4) NSAIDs
Pharmacologic therapy of acute back pain:
Corticosteroids

- No benefit
- Low strength of evidence
Pharmacologic therapy of acute back pain: Acetaminophen

- No benefit
- Low strength of evidence
  - 4 RCTs
Pharmacologic therapy of acute back pain: Muscle Relaxants

- Small benefit
- Moderate strength of evidence
  - 5 RCTs
Pharmacologic therapy of acute back pain:

**NSAIDs**

- Small benefit
- Low-Moderate strength of evidence
  - 5 RCTs
The Future: Lasers?

Low Level Laser Therapy
- 1 RCT
- Moderate-Large Benefit

But...
On, My Aching Back

• Yes: Heat + NSAIDs

• Maybe: Massage, acupuncture, muscle relaxants

• No: Acetaminophen, exercise

It’ll probably get better any way.

Questions and discussion
alan.dow@vcuhealth.org