Compass Opioid Stewardship in Practice Microlearning Series

Module 3: Nociplastic Pain

Welcome to Compass Opioid Stewardship in Practice. Each week, our Compass coaches will explore a real-world case, define a clinical goal, and walk through practical strategies to improve care. Whether you're tuning in via video, audio, or reading the summary, this session is built for busy clinicians like you.

This week's session is brought to you by Dr. Donald Stader, MD, FASAM, FACEP; Chief Executive Officer and Clinical Coach in the Compass Opioid Stewardship Program.

Case Presentation

This week's case is about Edward, who is a 45 y/o male patient experiencing chronic abdominal pain for over five years. The patient has had multiple CT scans, endoscopies, and other procedures without clear etiology of pain – his GI doctor has diagnosed him with irritable bowel syndrome and painful, daily chronic abdominal migraines. The patient has tried multiple medications – and is currently on a fentanyl patch and oxycodone for breakthrough pain. On exam, the patient has TTP out of proportion and complains of poor function and pain management. He also complains of significant anxiety and depression due to his pain. In today's microlearning, we are going to discuss the concept of nociplastic pain, how to make the diagnosis, and how treatment of these pain types differs from other types of pain management.

Clinical Background

First, let's start with some definitions – the International Association for the Study of Pain (IASP) defines three major categories of pain – as nociceptive, neuropathic, and nociplastic.

- **Nociceptive pain** is caused by tissue inflammation and damage
- **Neuropathic pain** is caused by nerve damage
- **Nociplastic pain** is a third category of pain that is caused by sensory processing and altered pain modulation

Nociplastic pain includes multifocal pain that is more widespread or intense than would be expected given the amount of identifiable tissue or nerve damage. Oftentimes, patients with nociplastic pain have normal diagnostic studies, as well as other CNS-derived symptoms. The classic example of nociplastic pain is fibromyalgia. A case like Edward's is highly suspicious for nociplastic pain, and the treatments applied may be suboptimal for achieving Edward's pain goals. The diagnosis of nociplastic pain is often a clinical diagnosis, made after diagnostic studies have ruled out other common causes of nociceptive pain. T**he Central Sensitization Inventory**, a 25 question validated questionnaire, can also be helpful.

One final term that clinicians may hear is that of **Neuroplastic pain** – this is a non-IASP term, but can be considered a synonym for nociplastic pain - it often associated with practitioners of mind-body medicine, and integrated with the thought that much of central pain is learned by the central nervous system, and hence can be unlearned.

It is helpful to diagnose patients like Edward with the correct pain type, as it significantly influences the treatment of pain. For instance, it is known that for nociplastic pain, opioids often result in poor pain control, decrease function, and worse long-term outcomes. Treatments that have been shown to be far more effective for nociplastic pain include mind body interventions, cognitive behavioral therapy, enhanced understanding, self management, sleep hygiene, graduated movement, and when it comes to pharmacotherapy, medications such as duloxetine, tricyclic antidepressants, or low dose naltrexone.

Back to the Case

So let's get back to the case. When evaluating patients like Edward, it is important to assess how they have been educated about their pain and pain type. Clinicians can ask whether they have ever been taught the difference between nociception, pain, and suffering, or whether they understand the distinction between nociceptive and nociplastic pain. Education often includes addressing pain-related anxiety and emphasizing the nonpharmacologic approaches that frequently improve symptoms.

Patients can also be introduced to the concept of the "five medicines": mind is medicine, psychology is medicine, sleep is medicine, movement is medicine, and finally, medicine is medicine. When patients with nociplastic pain become educated and knowledgeable about the appropriate treatment strategies, positive changes can often be made in their function, their medication regimen (including tapering opioids when appropriate), and most importantly their overall pain experience and quality of life.

Clinical Pearls

The clinical pearls we want you to remember are:

- Nociplastic pain is an important pain type to consider as you see patients with chronic pain.
- Nociplastic pain is a clinical diagnosis, and the Central Sensitization Inventory can be a helpful, validated adjunct to making the diagnosis.
- Neuropathic pain, nociceptive pain, and nociplastic pain can co-exist in a patient.
- Nociplastic pain is often worsened by opioid therapy and is a medication class of last resort.
- The evidence-based treatment of nociplastic pain involves excellent nonpharmacologic management, and if pharmacology is pursued, typically psychotropic medications such as tricyclic antidepressants or duloxetine can be used.

Thank You

This education has been brought to you through the generous support of the Centers of Medicare and Medicaid Services. Thanks for reading this week's Compass Opioid Stewardship in Practice Microlearning Series. Thank you for being part of the Compass Opioid Stewardship Program. And thank you for all you do caring for your patients.

Resources

- Non-Pharmologic Treatment of Pain