

The difference between **ascending** and **descending pain**:

Ascending Pain

This is the classic pain pathway most people are familiar with. It's when our body notifies our brain there is pain in the body.

- **Origin:** Starts at the site of injury or inflammation.
- **Pathway:** Pain signals travel *up* the spinal cord to the brain.
- **Mechanism:** Nociceptors (pain receptors) detect damage and send signals via peripheral nerves to the spinal cord, then to the brain.
- **Treatment Focus:** Typically managed with opioids or medications that activate the **endorphin/opioid receptors**.

Descending Pain

This is a more complex and less commonly understood mechanism.

- **Origin:** Begins in the brain, especially in cases of chronic, centralized pain.
- **Pathway:** Pain signals travel *down* the spinal cord and vagus nerve.
- **Mechanism:** The brain generates excess bioelectric activity due to constant pain, which overstimulates the nervous system and cardiovascular system.
- **Symptoms:** Elevated pulse, hot flashes, cold extremities, excessive sweating, and heightened sensitivity to touch (allodynia).
- **Treatment Focus:** Requires medications that activate **noradrenaline (norepinephrine) receptors**, not opioids.

Why It Matters

Understanding the difference is crucial because **descending pain doesn't respond well to traditional painkillers** like opioids or gabapentin. Misdiagnosing it can lead to ineffective or even harmful treatment strategies.

If you're dealing with chronic pain or know someone who is, this distinction could be a gamechanger in finding the right therapeutic approach. See the worksheet on chronic pain.