

Pain mechanisms

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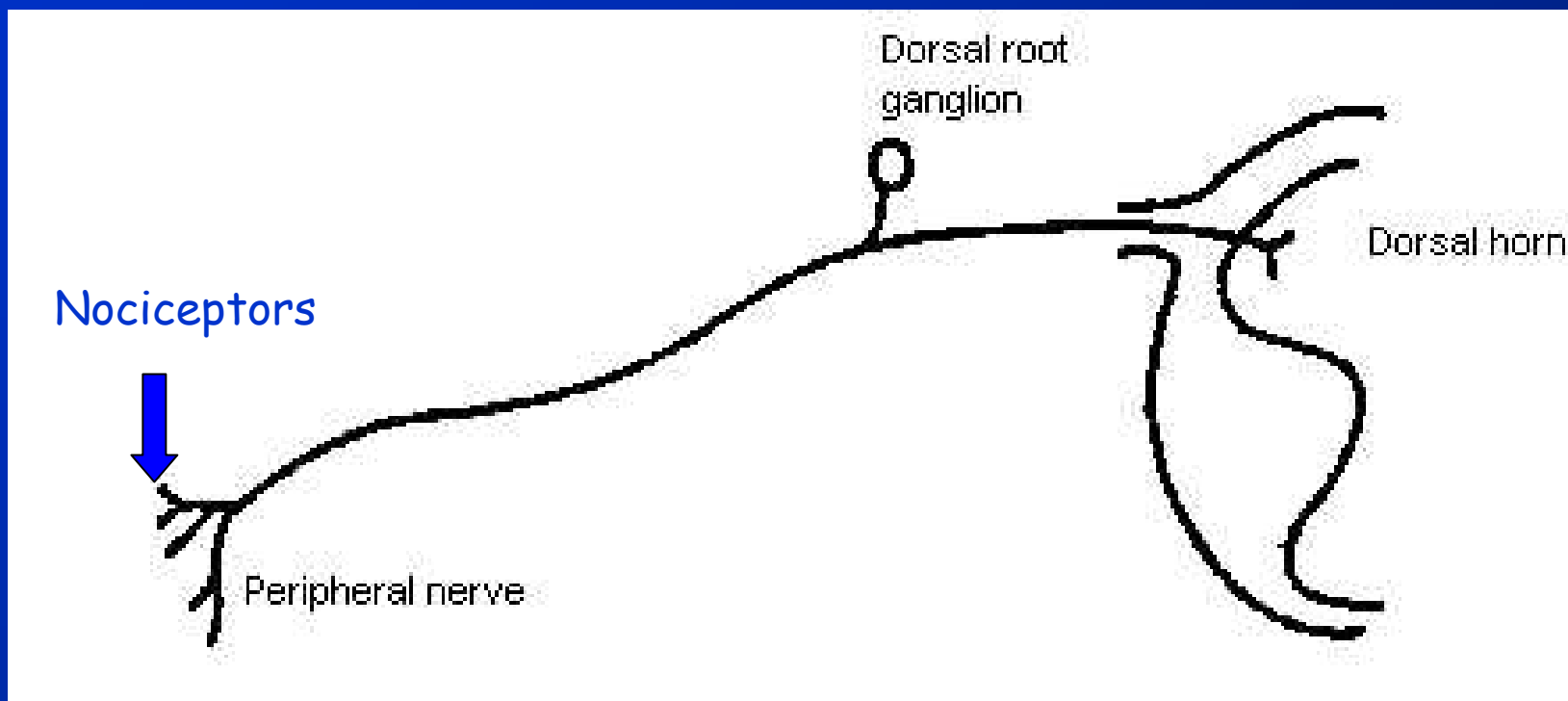
WHY is she in pain?



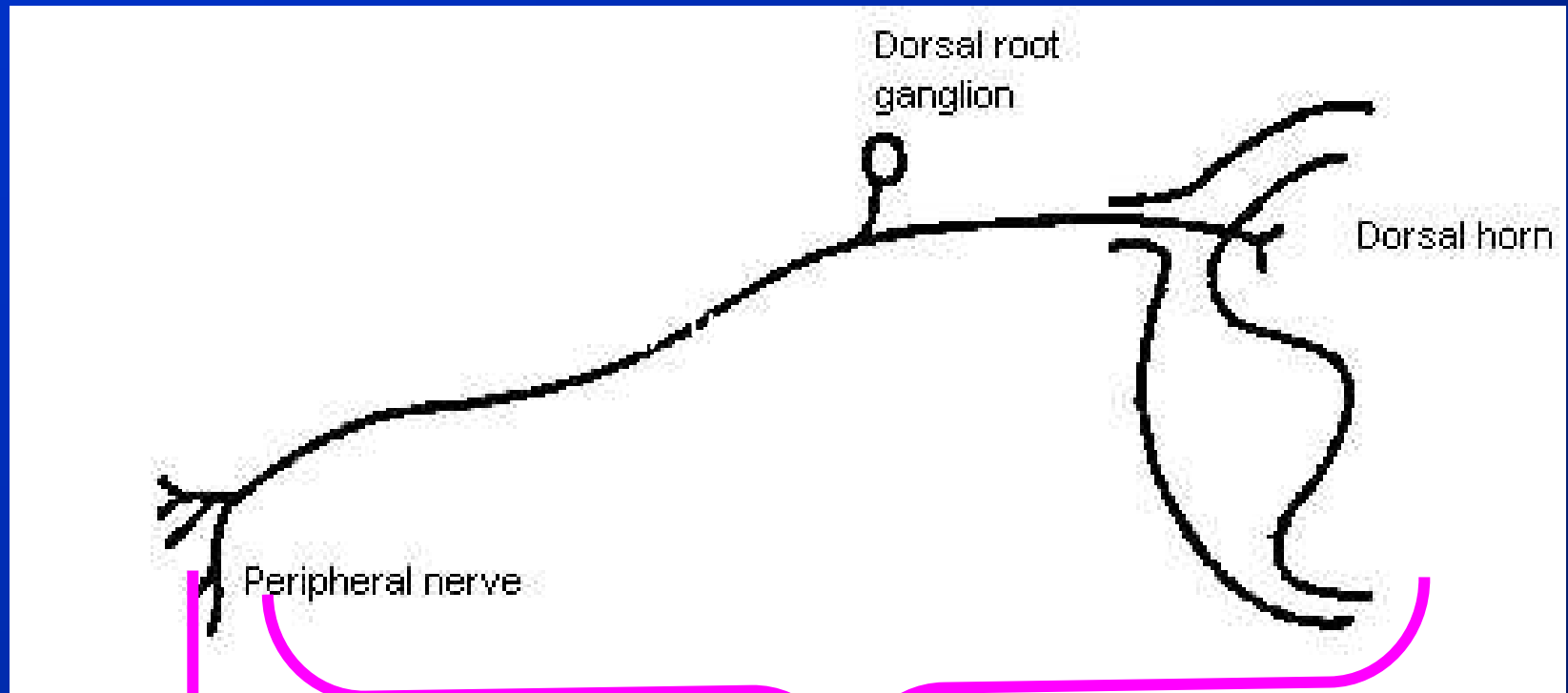
Pain in cancer: causes

- Cancer
- Cancer treatment
- Concurrent disorders
- General disability

Pain perception



Types of pain



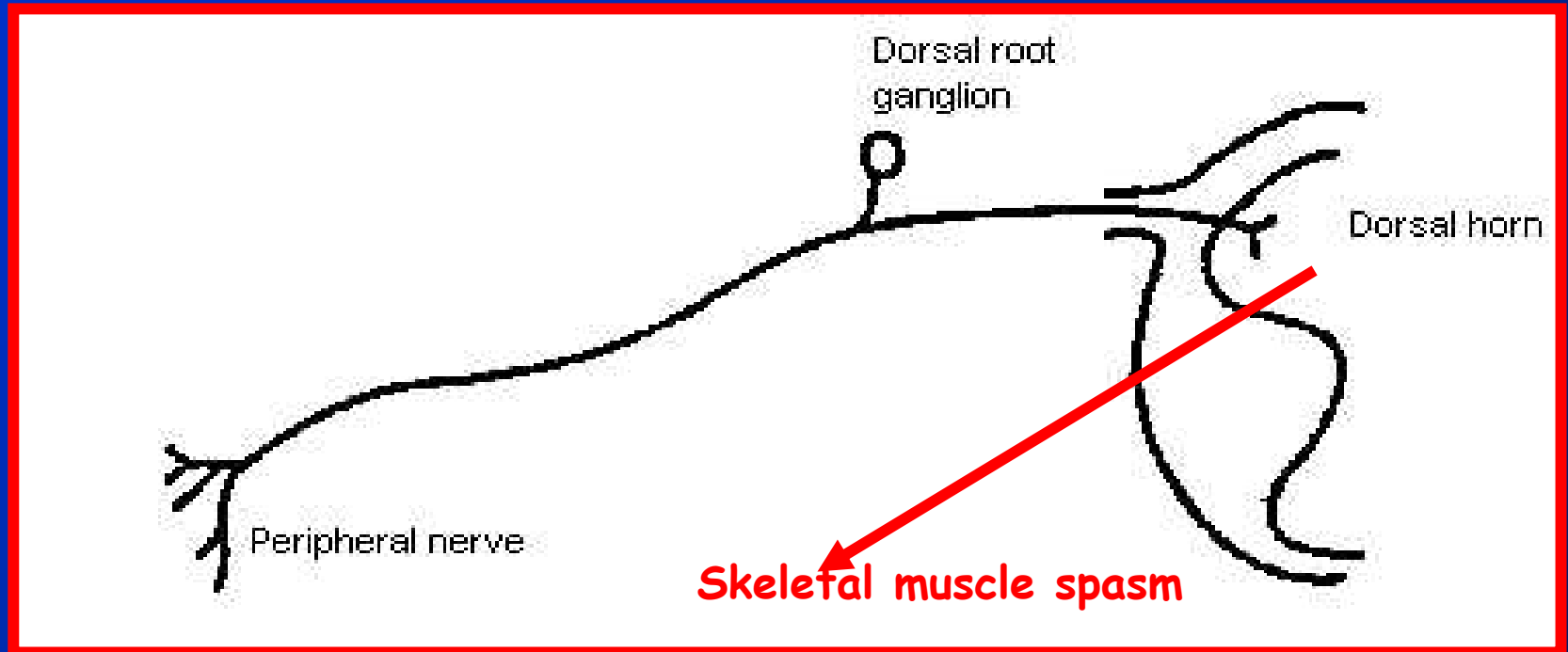
Nociceptive

Neuropathic

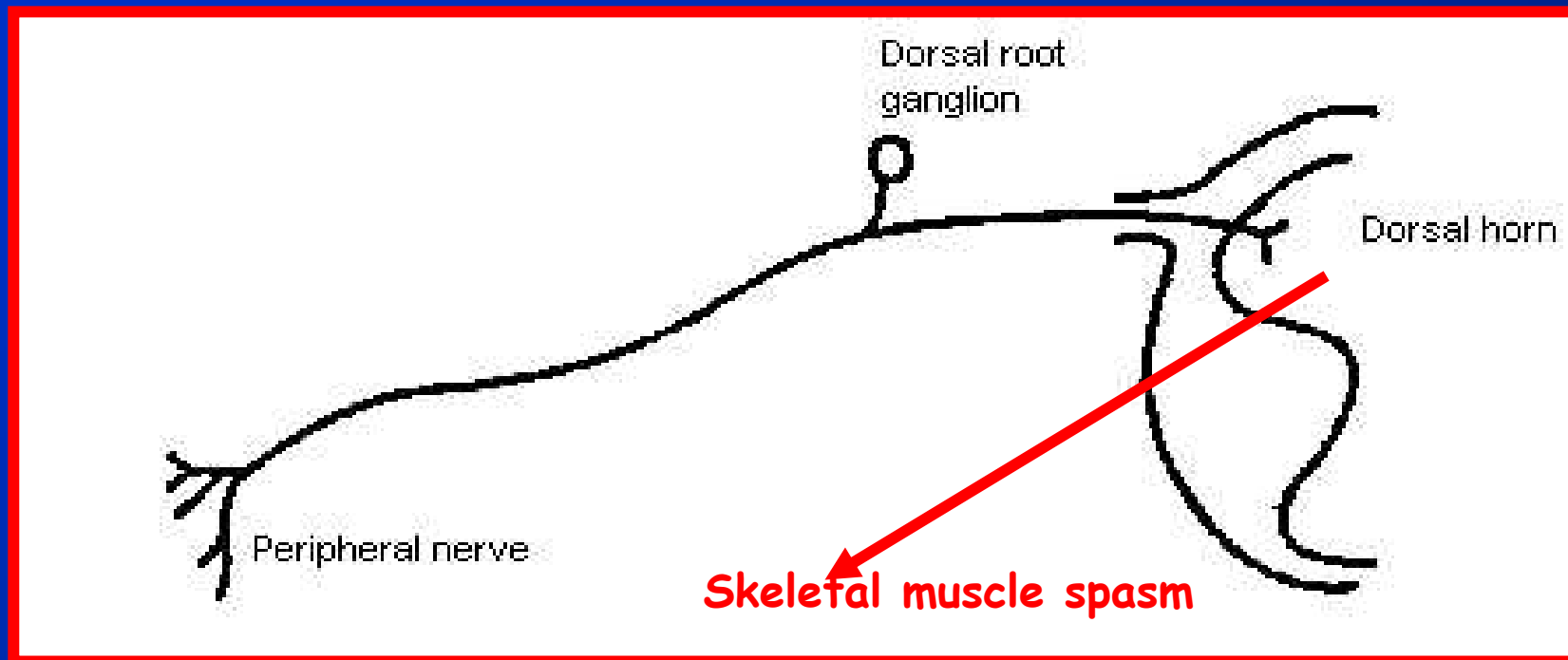
If the stimulus remains constant,
What will happen to the severity of
pain over time (say, 3 months)?

- Remain constant?
- Decrease?
- Increase?

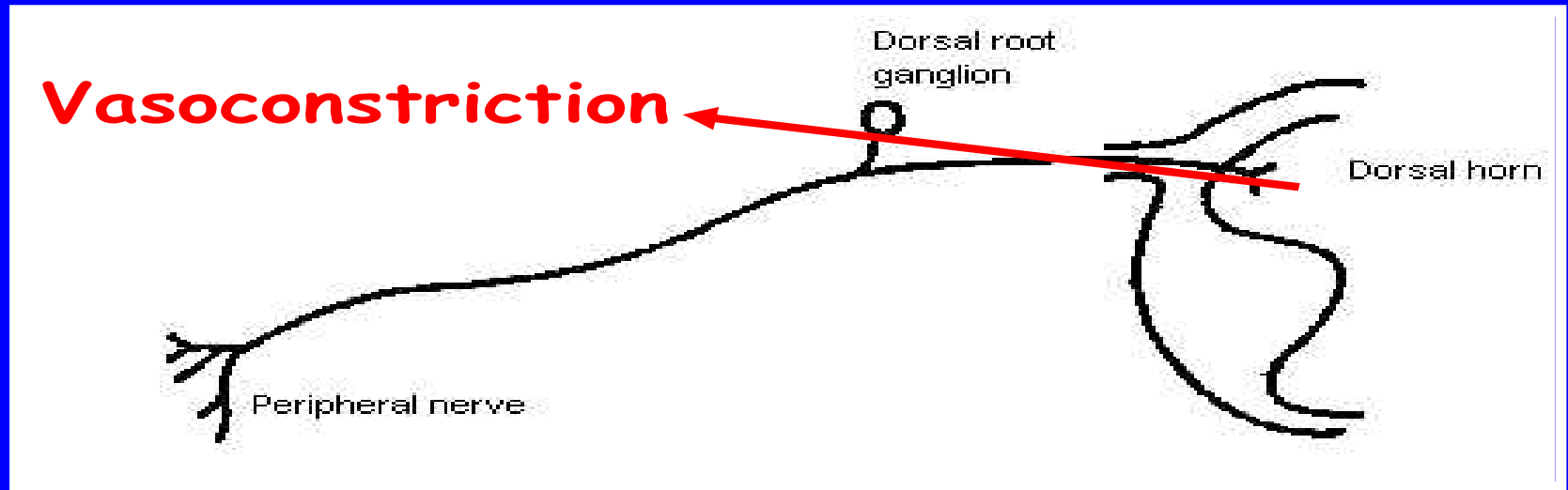
Reflex responses



Myofascial trigger points

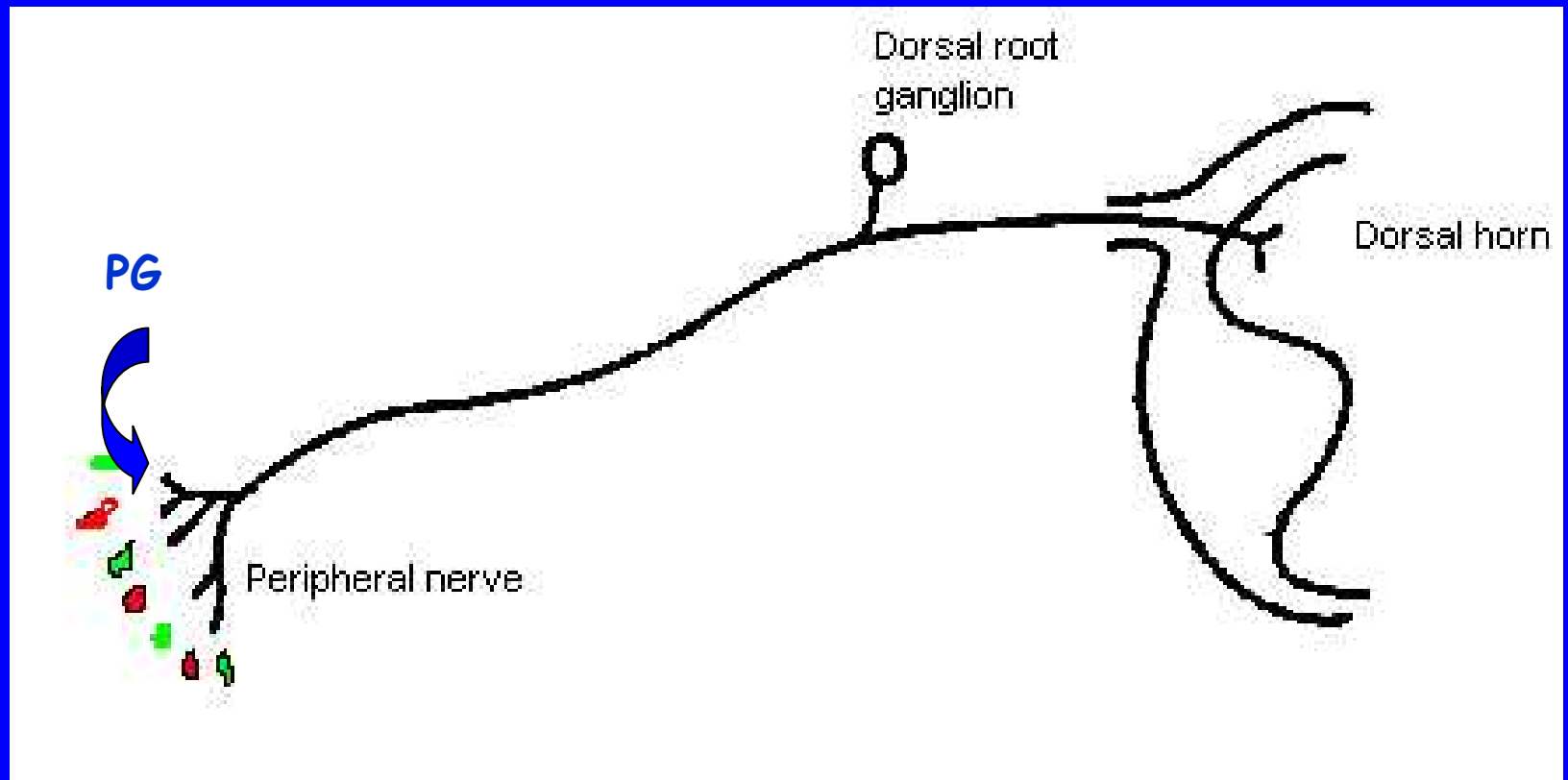


Reflex responses

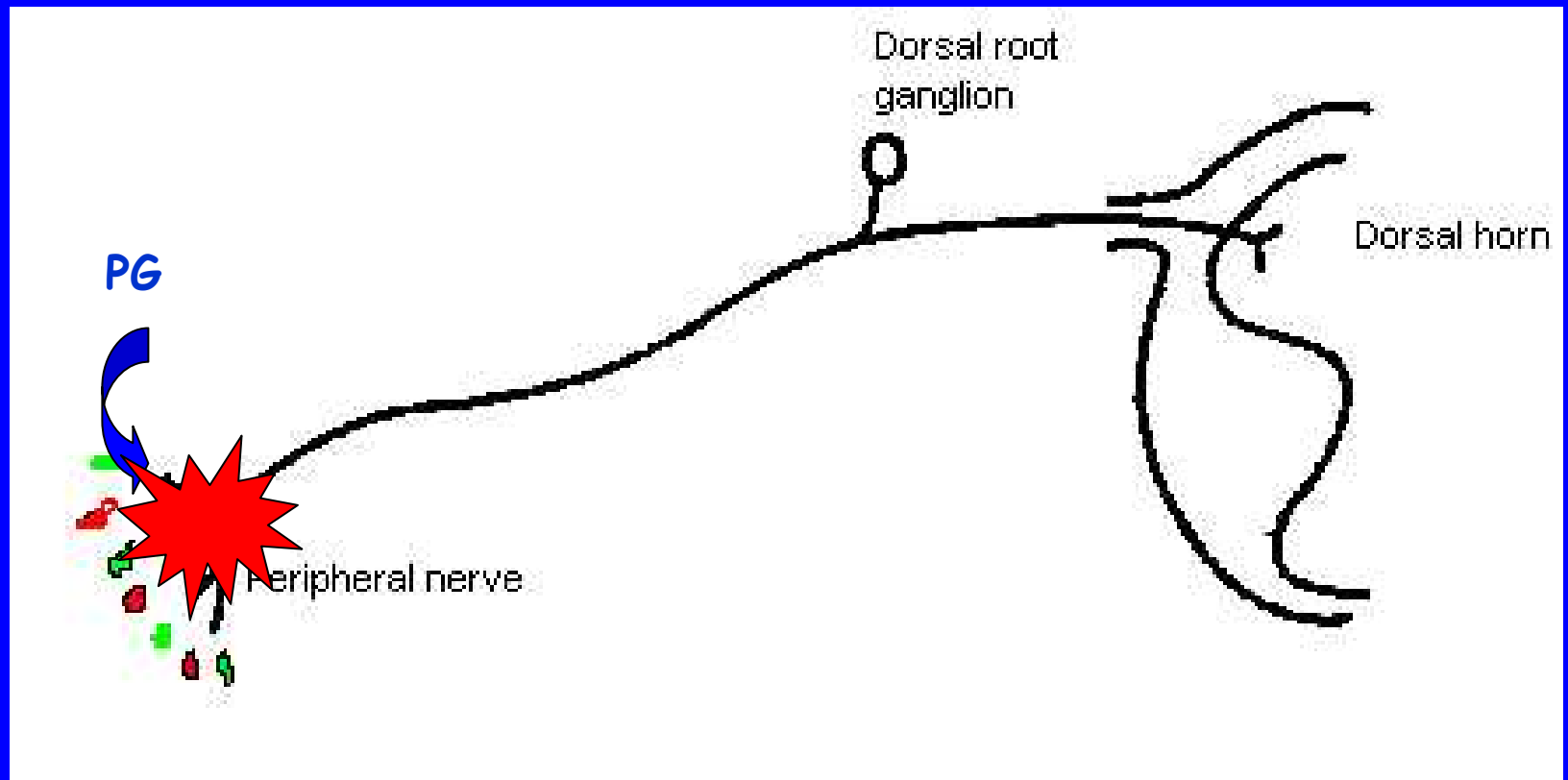


In ischaemic pain, analgesics alone may improve vascularity up to a point.

Peripheral sensitisation



Peripheral sensitisation



Relevance of peripheral sensitisation

NSAIDs can help where there is inflammation (like peri-tumor edema)

55 year old woman Pathological # spine

Poor response to analgesics

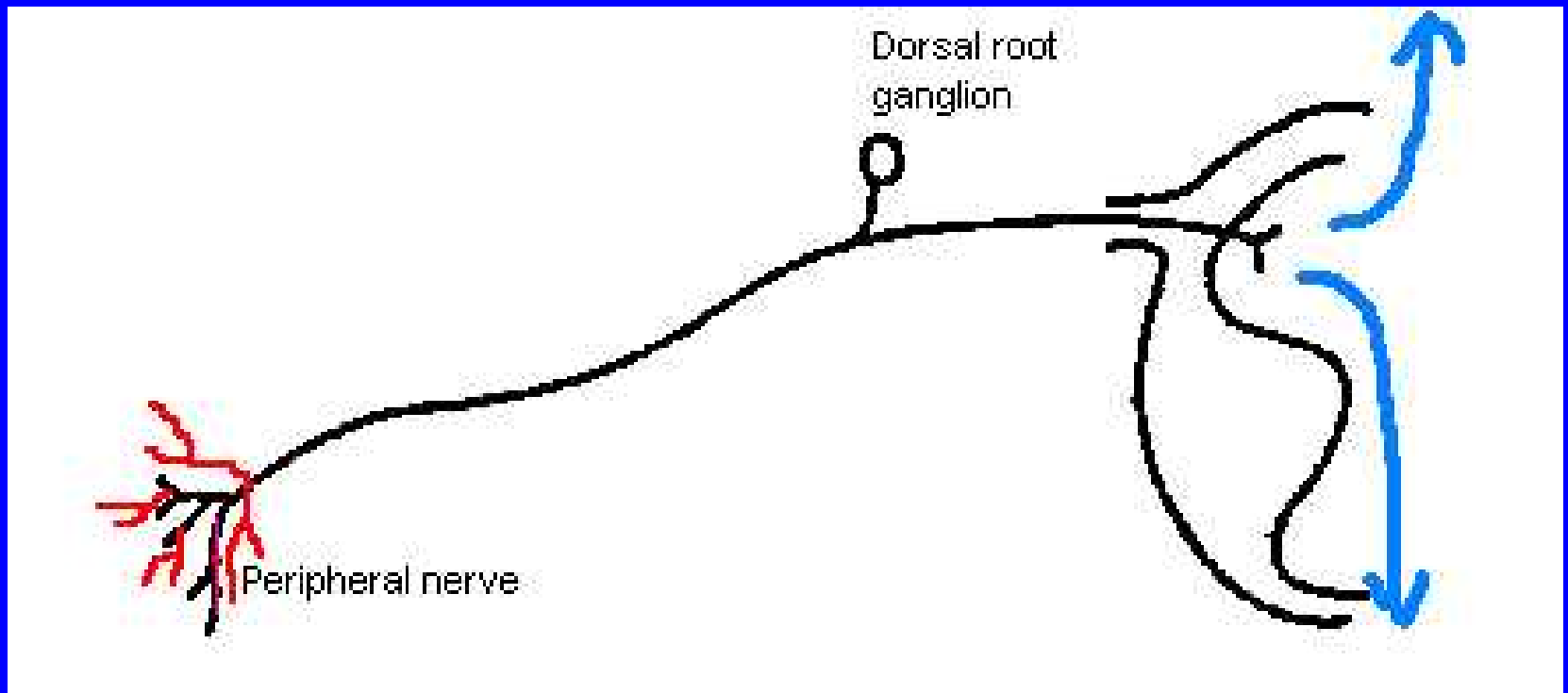
- Low backache - at times score 10
- Pain all over the body: score 8

55 year old woman Pathological # spine

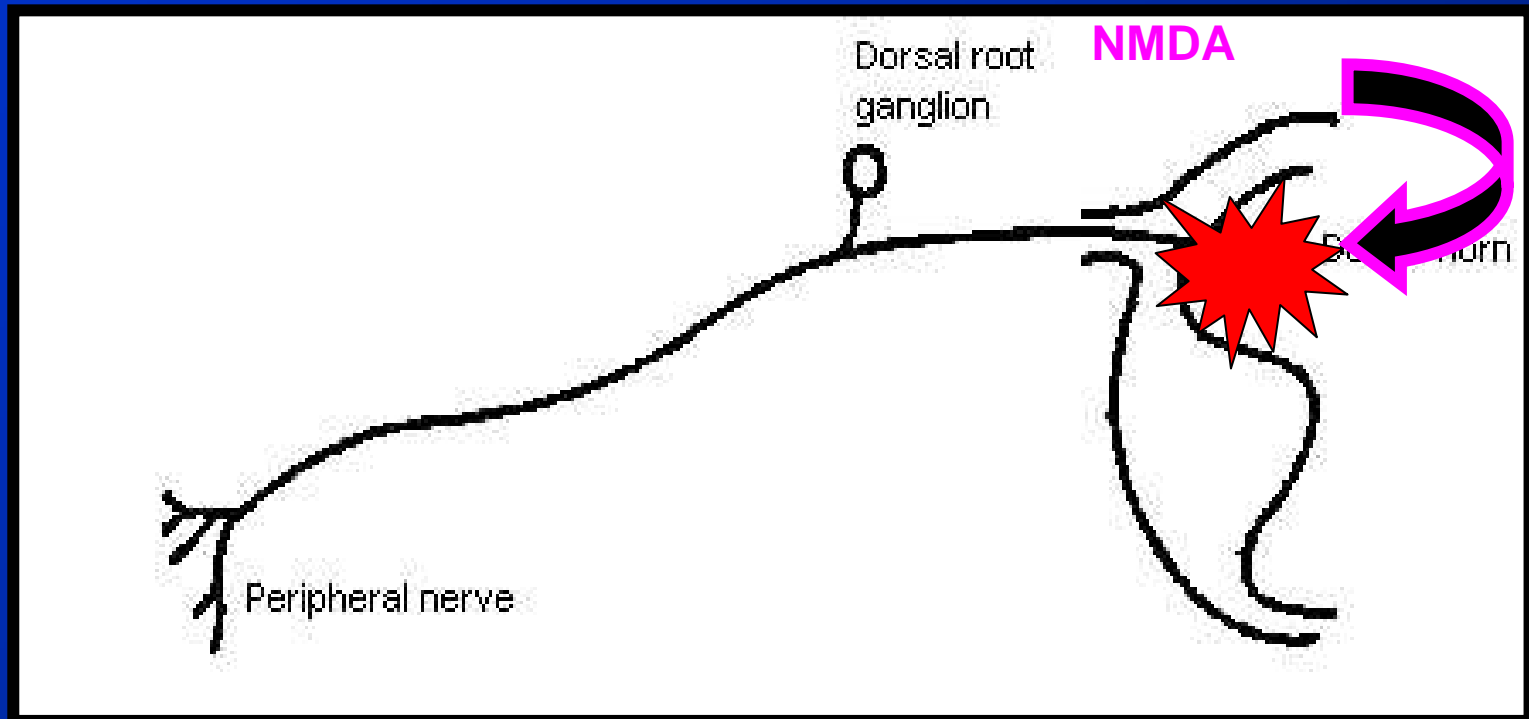
Poor response to analgesics

- Low backache - at times score 10
- Pain all over the body: *WHY?*

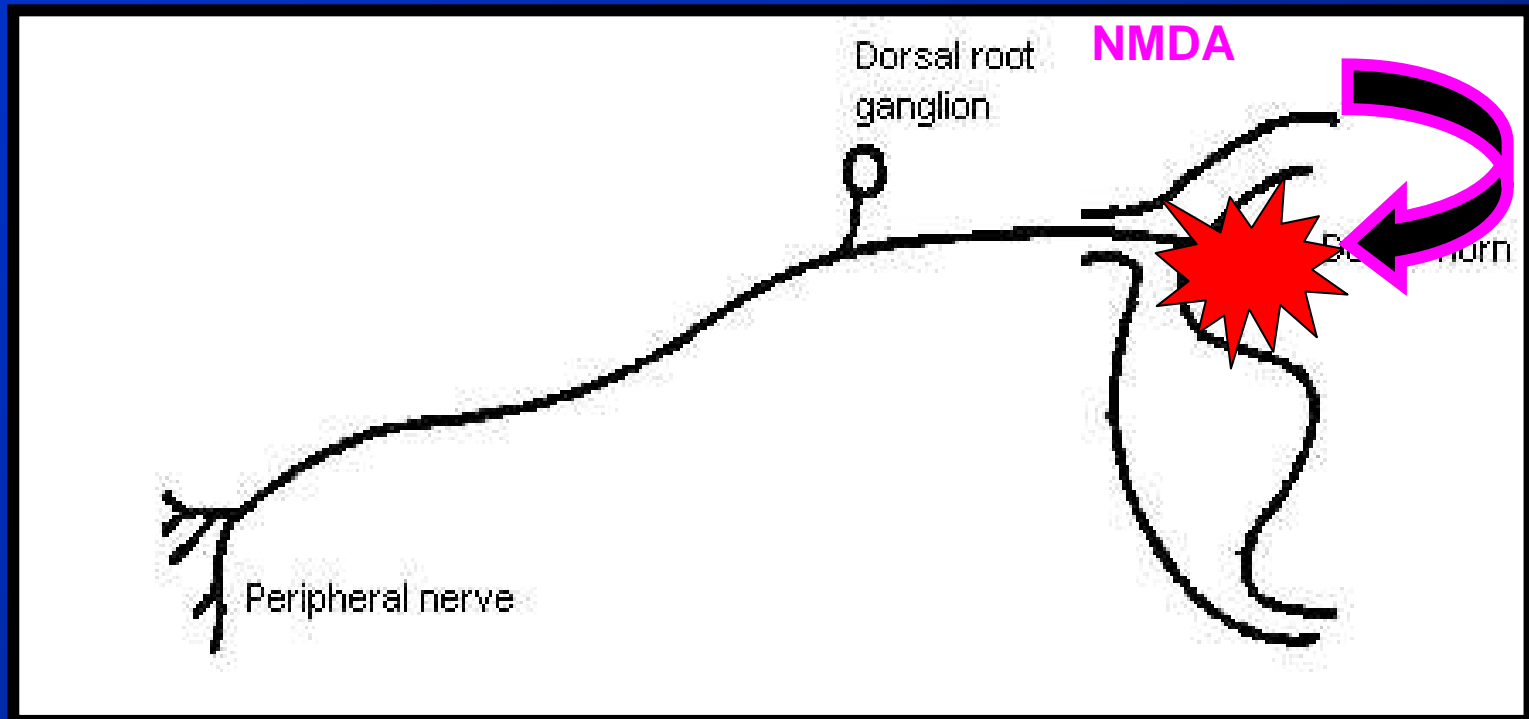
Recruitment



Central sensitisation "wind-up"



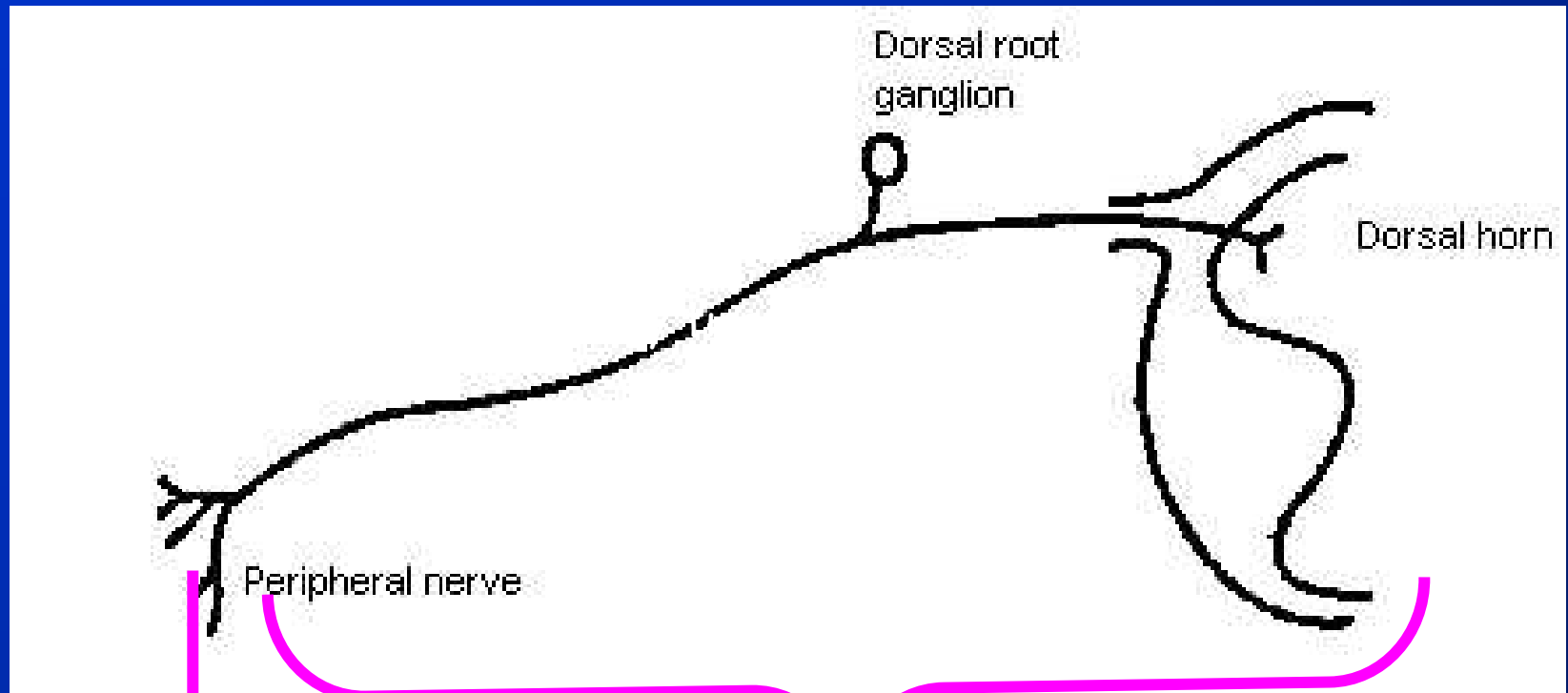
NMDA blockers like KETAMINE can relieve central sensitisation



With constant stimulus, pain may worsen over time due to:

- Reflex muscle spasm
- Reflex vasoconstriction
- Peripheral sensitisation
- Peripheral recruitment
- Central recruitment
- Central sensitisation (wind-up)
- Emotional distress

Types of pain



Nociceptive

Neuropathic

Neuropathic pain - features

- **D**istribution: Neural or dermatomal
- **N**ature of pain: Burning, pricking, aching, stabbing, lancinating etc
- **A**bnormal sensation in the area of pain

1: Believe the patient about the pain!

Pain

is what the patient says,

hurts!

2: Is there a correctable factor?

Look for the cause of the pain.

Correct the correctable!

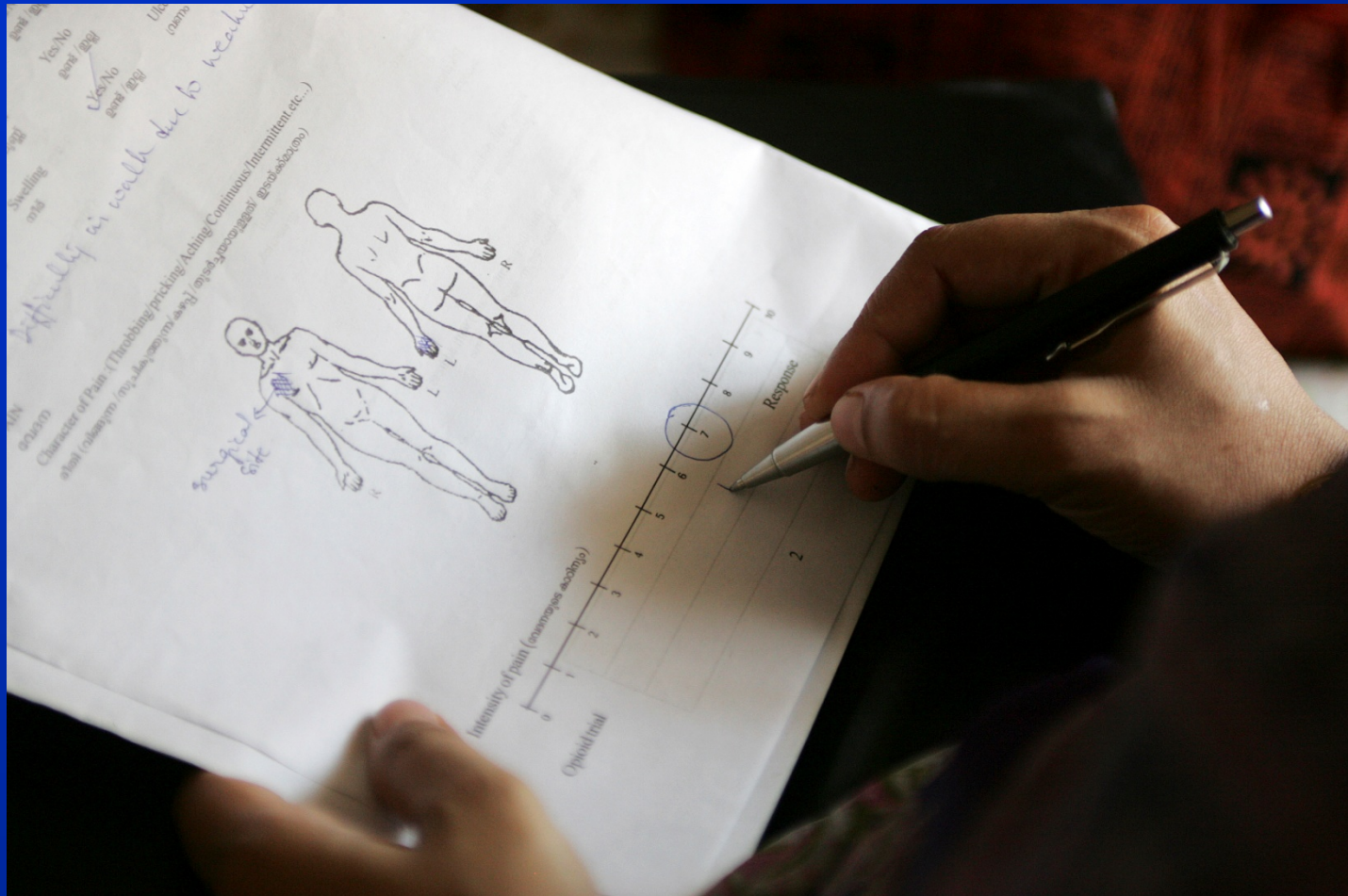
(Irradiation? Chemotherapy?

Surgery? ART?)

3: Consider affordability

When treatment costs are out-of-pocket,
unless the medication is affordable,
compliance will be poor!

4. Documentation



5: Look for emotional overlay

- Anxiety? Depression?
- Insight about diagnosis & prognosis?
- Psychosocial issues?

Correct the
correctable!

