## Case series: neuropathic pain and amiotrophic lateral sclerosis



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#### Background:

Amyotrophic lateral sclerosis (ALS) is a rare neurodegenerative disease.

Primary cause of neuropathic pain, very frequently present in these patients, may be impaired somatosensory pathways.

Degeneration of IENF (intraepidermal nerve fiber), which are terminal nociceptors, greatly increases the risk of developing neuropathic pain in patients with peripheral neuropathy. The most commonly used pain medications in ALS are NSAIDs, acetaminophen, pregabalin, and tricyclic antidepressants. Opioids are the second option.

#### Case report:

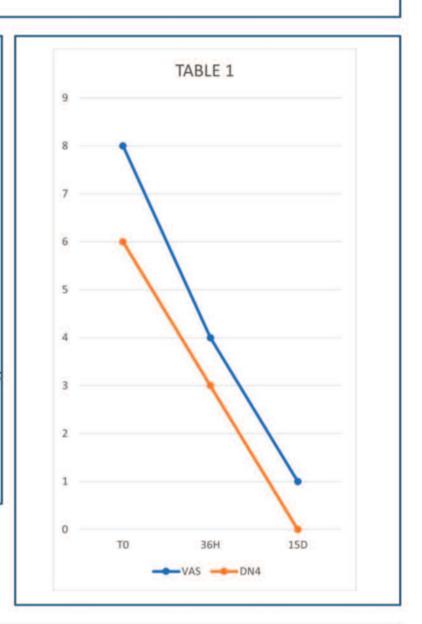
We report a case series of two patients suffering from amyotrophic lateral sclerosis and neuropathic pain.

Both patients reported severe pain with mean VAS 80 mm and DN4

6/10 each. Both were treated with tapentadol 25mg twice daily and pregabalin 25mg twice daily.

They were also treated with a non-drug therapeutic program featuring manual treatment, regular stretching, and passive and active mobility exercises. After 36h from the treatment both reported an improvement of painful symptoms with an average VAS 40mm and DN4 3/10. After 15 days of this multidisciplinary therapy, the VAS was 10 mm in both patients and the DN4 was 0.

None had respiratory depression or worsening hypoventilation, deterioration of consciousness and impair ed gastrointestinal motility.



# Pharmacological treatment

TAPENTADOL 25mg/Twice daily

PREGABALIN 25mg/Twice daily

NOT Pharmacological treatment

MANUAL TREATMENT

REGULAR STRETCHING

**MOBILITY EXERCISES** 

### Conclusion:

This treatment has been shown to be safe and effective in treating ALS-related neuropathic pain, but an extensive literature review and several studies are needed to better understand the treatment of the painful condition of this type of patients.