

# Flecainide's Role in Refractory Neuropathic Pain: A Case Report.

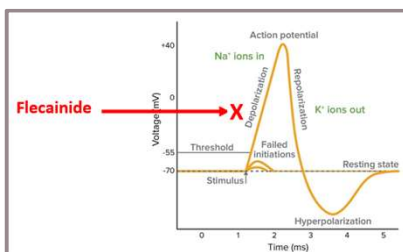
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## Objective

Flecainide, a sodium channel blocker well known for its use in the treatment of arrhythmias, is increasingly being seen in pain management.

Given similarities in structure and mechanism to local anaesthetics, it may have a role in managing refractory neuropathic pain, as described in the following case.



<https://www.moleculardevices.com/applications/patch-clamp-electrophysiology/what-action-potential>

## Clinical Features

A 34-year-old male was hospitalised with a three day history of worsening cold and flu symptoms and no past medical history.

### Presenting symptoms:

- Vasoplegic shock
- Bilateral compartment syndrome

### Diagnosis:

Meningococcal septicaemia

### Management:

- Multiple fasciotomies
- Multiple debridement's
- Bilateral below knee amputations.
- Treatment of refractory neuropathic pain

## Literature review

1. Flecainide exerts a local anaesthetic effect to facilitate neuropathic pain relief<sup>1,2</sup>.
2. Flecainide reduces activity at peripheral nerve endings<sup>3</sup>.
3. Flecainide's structure mimics that of local anaesthetics like lidocaine<sup>4</sup>.



<https://prc-alliance.com/news/peripheral-neuropathy-neuropathic-pain/>

## Pharmacist Interventions, Case Progress and Outcomes:

The pharmacist played a pivotal role in:

- Monitoring efficacy
- Liaising with the Acute Pain Service to instigate daily electrocardiograms during initial dose titration
- Monitoring potential adverse effects, including QT prolongation and proarrhythmic effects

The patient was initiated on a flecainide dose of 100 mg twice daily, which increased to 150mg twice daily after 24 hours.

Flecainide provided partial pain relief, although relief waned towards the end of the dose interval. Titration of flecainide in response to the patient's pain score was imperative to optimise analgesia.

The patient was not discharge home with flecainide as part of his pain management.

## Conclusion

Flecainide's use in the management of refractory neuropathic pain requires further investigation.

The success of this case suggests further studies are needed to establish:

- optimal dosage regimen
- pharmacodynamics relating to pain relief

This knowledge could improve our understanding of its role in neuropathic pain management.

## Does flecainide's future lie in pain management?

## References

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3. Flecainide reverses neuropathic pain and suppresses ectopic nerve discharge in rats. Ichimata M<sup>1</sup>, Kitano T, Ikebe H, Iwasaka H, Noguchi T. *Neuroreport*. 2001 Jul 3;12(9):1869-73.
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