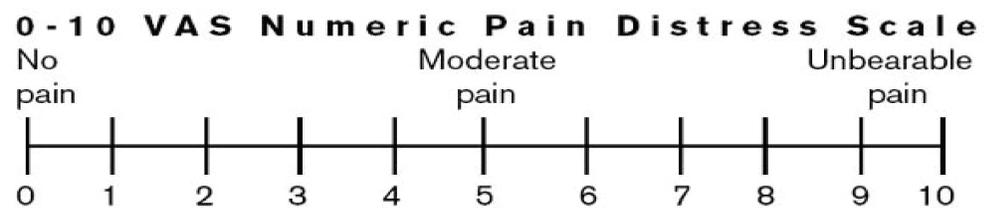


# Resistant Phantom Limb Pain: Treatment Without a Leg To Stand On

**Jonathon Beck** B.Pharm, GradCertAppPharmPrac, **Duncan Long** B.PharmGradCertClinPharm(UQ), GradCertDiabEducat (UTS)  
Pharmacy Dept, Princess Alexandra Hospital, Brisbane, Queensland

## Objective

Phantom Limb Pain (PLP) refers to the painful sensation after amputation of a limb. Considered to be a neuropathic pain condition, PLP can be difficult to treat with various analgesic medications having been studied and utilised in practice, yet no clear guidelines emerging to help address this prevalent issue amongst amputees. With this case we aim to provide insight into the difficulties in managing this condition and the emerging role of calcitonin as a potentially effective PLP relieving medication.



**Figure 1:** Numeric pain scale used in this case

## Clinical Features

The patient is a 58 year-old female who underwent trans-tibial amputation post popliteal artery thrombosis. The development severe PLP despite the use of multiple analgesics (Table 1) emerged due to her complex history. Her symptoms were described as having “barbed-wire” constantly wrapped around her foot, with subjective pain scores regularly noted as 8/10 on the Visual Analogue Scale (VAS).

Pregabalin and oxycodone/naloxone were initially up-titrated, in conjunction with regular paracetamol and PRN oxycodone.

## Interventions

Intravenous calcitonin was trialled. Guidance on dosing was provided from a number of small trials and case reports. Calcitonin was initiated at a dose of 100 I.U. on the first day, then a second infusion of 200 I.U. two days afterwards.

## Case Progress/Outcomes

Within the week following the two calcitonin infusions, VAS scores were reduced to an average of 4/10 which had a lasting effect for 3 months, whereby the patient was readmitted for repeat therapy due to relapse of symptoms. A 50% reduction in pain constitutes a clinically significant analgesic effect, and as expected, improved quality of life. It was also observed that the patient had no further escalation of Targin and pregabalin doses in the 3 months following therapy suggesting a dose sparing effect on opioid and other potentially harmful medications.

## Conclusion

Intravenous calcitonin has shown to be useful anecdotally in the rehabilitation setting to treat severe, resistant PLP in combination to standard neuropathic analgesic agents. Further clinical trials will be required to provide more robust evidence for its use and inclusion into guideline base management of PLP.

Drug	Dose	Indication
Aspirin	100 mg mane	CVA/TIA
Oxycodone/ Naloxone	10 mg/5 mg BD	Severe pain (Stump)
Pregabalin	150 mg BD	PLP
Pantoprazole	40 mg BD	GORD
Atorvastatin	20 mg nocte	CVA/TIA
Frusemide	60 mg mane + 40 mg nocte	Independent oedema of right leg
Sertraline	100 mg nocte	Depression/BPAD
Rivaroxaban	20 mg mane	Bilateral PE (confirmed on CTPA)
Sodium Valproate	1000 mg BD	BPAD/Epilepsy

**Table 1:** Regular medications taken by the patient