Clonidine is an alpha-2 adrenergic agonist that has been used for many years as an antihypertensive drug (treating high blood pressure).

It has also been found to have analgesic effects in migraine ([i]), post-operative pain ([ii]) post-herpetic neuralgia ([iii]) and diabetic neuropathy ([iv]).

Spaulding et al ([v]) reported on the antinociceptive activity of clonidine and noted that it can potentiate morphine analgesia. Haddox' review of coanalgesic agents mentions clondine as being effective in diabetic neuropathy and the transdermal preparation has been reported anecdotally ([vi]) to decrease the pain of CRPS (Reflex sympathetic dystrophy) if applied to the affected extremity.

Often clonidine is administered via the epidural route in conjunction with other analgesia.

This will be discussed further in a different article.

In the cancer population, a trial of oral or transdermal clonidine may be considered in the management of persistent neuropathic pain refractory to opioids and other adjuvants.

Clonidine is available in 0.1 mg tablets, but the Catapres? patch (0.1 mg and 0.2mg) is designed to deliver the specified dose daily and must be changed every seven days.

A trial should commence with very low doses e.g start at 0.1mg at bedtime and increase gradually. Side effects include sedation (the major side effect) bradycardia (slow pulse), hypotension (low blood pressure), dry mouth, constipation, dizziness and depression.

Postural hypotension (drop in blood pressure on standing up) is a common adverse effect, which may limit the dose that can be tolerated.

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[i] Boisen E et al *Acta Neurol Scand* 1978;58:288-295 Clonidine in the prophylaxis of migraine.

[ii] Bonnet F, Boico O, Rostaing S et al *Anesthesiology* 1988;69:A395 Clonidine for post-operative analgesia.

[iii] Max MB, Schafer SC, Culnane M, Bubner R, Gracely RH *Clin Pharmacol Ther* 1988;43:363-371 Association of pain relief with drug side effects in postherpetic neuralgia: a single dose study of clonidine, codeine, ibuprofen and placebo.

[iv] Tan Y-M, Croese J *Ann Intern Med* 1986;105:633 Clonidine and diabetic patients with leg pains.

[v] Spaulding TC, Fielding S, Venafro JJ, Lal H *Eur J Pharmacol* 1979;58:19-25 Antinociceptive activity of clonidine and its potentiation of morphine analgesia.

[vi] Byas-Smith MG, Max MB, Muir J et al *Pain* 1995 Transdermal clonidine in the treatment of reflex sympathetic dystrophy.