# Clonidine injection

Red–for medicines normally initiated and used under specialist guidance

## Introduction

The guide is intended for use in primary and secondary care to support the management of patients receiving clonidine injection for refractory pain or refractory agitation at end of life.

Clonidine injection should only be started by a specialist in palliative medicine and patients require ongoing specialist supervision.

**Description**

Clonidine is an alpha 2 agonist, used orally for hypertension, migraine prevention, vascular headaches and menopausal symptoms, particularly flushing and vasomotor conditions.

In palliative care the injection (no longer listed in the British National Formulary) is used for difficult-to-treat pain and/or terminal agitation.

## Preparations

Tables are best viewed in landscape mode on mobile devices.

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| **Clonidine injection** | 150 micrograms/ml injection | 1 ml ampoules |

## Indications

- Pain refractory to standard therapies or where other therapies are deemed inappropriate.
- Refractory terminal agitation.

## Cautions

**Contraindications:** severe bradycardia**.**

**Cautions:** cerebrovascular disease, heart failure, mild to moderate bradycardia or peripheral vascular disease.

**Monitoring:**

Take heart rate (HR) and blood pressure (BP) measurements:

- at baseline before dosing
- 1 hour and 4 hours after first dose and after dose increases, and
- daily at other times.

There is little specific evidence to support frequency of monitoring, but a pragmatic approach should be taken particularly if used at end of life where monitoring will not be beneficial.

Patients should be counselled about the risk of sedation and the risk of hypotension (including postural) particularly if still mobile.

### Drug interactions:

Medications with alpha 2 antagonistic properties, ie mirtazapine or antipsychotic medicines, may reduce, prevent or abolish effects of clonidine.

Other medications which lower either BP or HR can have an additive effect.

**Liver impairment:** not significantly impacted.

**Renal impairment:** half-life is increased (doubled) so a smaller dose may be appropriate.

### Side effects

Constipation; depression; dizziness; dry mouth; fatigue; headache; nausea; postural hypotension; salivary gland pain; sedation; sexual dysfunction; sleep disorders; vomiting.

Delusions; hallucination; malaise; paraesthesia; Raynaud's phenomenon; skin reactions.

## Dose and administration

Initial administration of clonidine:

- Give an initial loading, test dose of 75 microgram subcutaneous (SC) immediately.
- If no benefit, repeat after 1–2 hours.
- If still no benefit after two loading doses, consider alternative therapies.

If benefit after **one loading dose**:

- start clonidine 150 microgram/24 hours continuous subcutaneous infusion (CSCI) and 75 SC as required up to four times per day**.**

If benefit after **two loading doses**:

- start clonidine 300 microgram/24 hours CSCI and 75 SC as required up to four times per day**.**

If necessary, increase the CSCI in 150 microgram increments every 1–2 days.

Note

- Typically, the effective dose is 300–600 microgram/24 hours.
- Maximum reported dose is ≤1,500 microgram/24 hours.

**Discontinuing clonidine:** patients on long term clonidine may experience rebound effects, hypertension or agitation, if suddenly stopped. If possible, titrate dose down over 3–7 days as appropriate.

# References

Howard P, Curtin J. BMJ Supportive & Palliative Care 2022;0:1–5. doi:10.1136/bmjspcare-2022-003651

Charlesworth, S. (Ed.). (2020). Palliative Care Formulary (7th ed.). Pharmaceutical Press.