



University Hospital Birmingham NHS Foundation Trust Palliative Care Guidelines

Information Sheet on the use of Alfentanil Injection in Palliative Care

This information sheet is intended as a resource for staff looking after palliative care patients who have been prescribed alfentanil for pain relief. It is not a clinical guideline.

What is alfentanil?

Alfentanil is a synthetic strong opioid, which selectively acts at mu-opioid receptors. It is licensed to be used as an analgesic during anaesthesia, but it is also used by subcutaneous injection for pain relief in palliative care.

When is it used in palliative care?

Unlike morphine, alfentanil does not accumulate in renal failure, even with repeated or continuous dosing. Therefore it can be used as background analgesia in patients with poor renal function

It has a rapid onset, and a short duration of action. This makes it particularly useful for incident pain e.g. before changing a dressing, or turning a patient, if it is given immediately prior to the procedure. Its place for breakthrough pain is less well understood because its effect wears off so quickly. However, in the absence of another appropriate drug it may be prescribed for breakthrough pain. In this situation it is likely doses would be needed every 1-2 hours. Please contact a member of the palliative care team if you are unsure how alfentanil should be used.

How is it given?

Alfentanil can be given by continuous sub-cutaneous (SC) infusion via a syringe driver, or as a bolus SC dose. This enables levels of analgesia to be titrated more efficiently than using e.g. a fentanyl patch.

In a syringe driver alfentanil should be diluted with WFI. It can be mixed with most other commonly used drugs in palliative care – ask advice from the palliative care team or pharmacist.

Bolus doses can be given as a SC injection. It is recommended that the lower strength (500mcg/ml) ampoules be used as no further dilution is necessary. If the higher strength (5mg/ml) is used it must be diluted with 0.9% sodium chloride (see below for different ampoule strengths/sizes).

What doses are used?

A typical starting dose if patients are opioid naïve is 0.5-1mg/24 hours. Most patients will have been on another strong opioid prior to being prescribed alfentanil. Therefore their dose will be based on their previous opioid requirements. Approximate conversions are shown below, although a pain assessment will have been done before alfentanil is prescribed, and the dose adjusted accordingly.

Approximate 24 hour Equivalent Doses			
Oral morphine	SC morphine	SC diamorphine	SC alfentanil
30mg	15mg	10mg	1mg

Bolus doses are prescribed at 1/6 of the total 24 hours dose of strong opioid

How is it supplied?

Alfentanil is a controlled drug and must be ordered from pharmacy in the CD order book. It is available in three different ampoules;

- 500mcg/ml; 2ml amp i.e. 1mg/2ml
- 500mcg/ml; 10ml amp i.e. 5mg/10ml
- 5mg/ml; 1ml amp

What should be monitored for when a patient is started on alfentanil?

Whenever a patient is transferred from one strong opioid to another they should be monitored for signs of being;

- under opiated – i.e. increased pain
- over opiated e.g. drowsiness, confusion, respiratory depression

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