Multicentre Palliative Care Audit

Alfentanil sublingual spray for pain control

Background

Episodic (breakthrough) pain is common, often rapid in onset and severe. There are two main types:

- *incident (predictable) pain*, related to movement (the majority) or activity, e.g. swallowing, defecation and coughing
- *spontaneous (unpredictable) pain*, unrelated to movement or activity.

The traditional use of oral immediate release opioids (morphine or oxycodone) is not ideal because:

- they take too long to work (e.g. peak effect may take 30 to 90 minutes)
- they may last longer than required leaving the patient feeling drowsy for several hours.

An ideal treatment for episodic pain would work rapidly and be relatively short acting.

Sublingual alfentanil provides an alternative with certain advantages:

- sublingual (SL) administration allows rapid absorption and quicker onset of pain relief
- its duration of action is much shorter than for morphine or oxycodone (e.g. 10 to 15 minutes *versus* 2 to 4 hours)
- it can be used by patients at home.

Sublingual alfentanil can therefore be considered a rapid-onset rapid-offset analgesic.

There are two reasons for auditing the introduction of sublingual alfentanil spray:

- it is important to look at benefits and problems of a new approach within a framework of clinical governance
- medication use is overseen by the hospital drugs and therapeutics committee and they require evidence to justify new approaches.

Notes on the use of alfentanil sublingual spray

Formulation

- the pharmacy department in Torquay manufactures alfentanil sublingual spray
- they produce bottles containing 5ml of alfentanil solution at a concentration of 1mg/ml
- the metered dose pump action top delivers 0.14ml per spray (i.e. 0.14mg of alfentanil per spray)
- the concentration and the volume per spray are fixed and so the dose is adjusted by increasing the number of sprays given at a time.

Practical issues

- each bottle is for single patient use since the tip can touch the patients tongue or mouth
- use is recorded in the controlled drug ward stock book.

Notes for prescribers

- the dose is prescribed as both the number of sprays and the total volume this delivers, e.g. ‘4 sprays = 0.56ml’. Include a reminder in the ‘directions for use’ section to prompt the completion of the audit sheet
- the usual starting dose is 4 sprays [=0.56ml]. If necessary the dose can be increased to 6 sprays [=0.84ml] then 9 sprays [=1.26ml] then 12 sprays [=1.68ml])
- volumes exceeding 2ml are difficult to hold sublingually and are more likely to be swallowed, reducing the efficacy of this approach.

Overview of the Audit

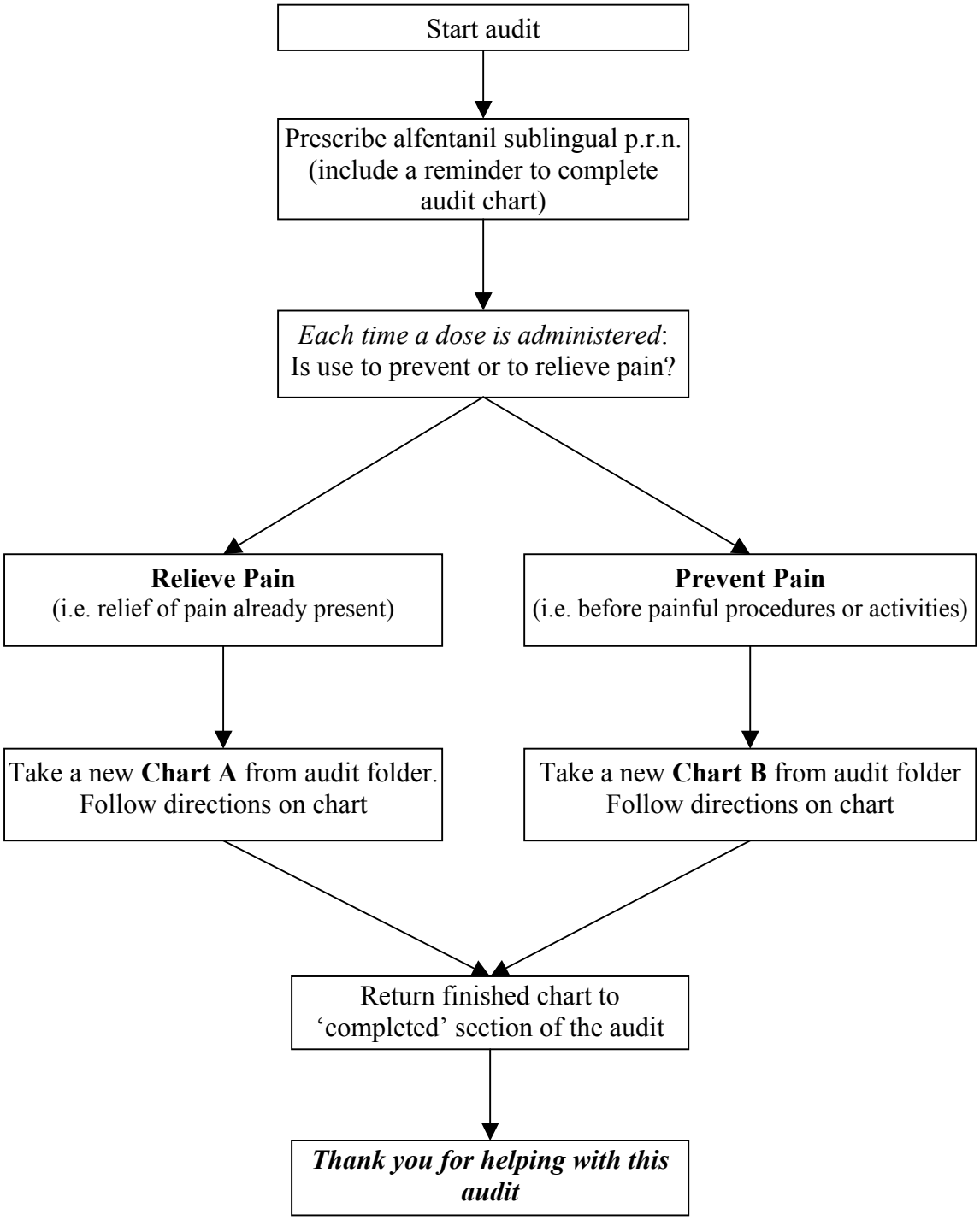

Chart A. Alfentanil for relieving pain

Form completed by_____

(i.e. the relief of pain already present due to spontaneous, incident or procedure related pain)

Patients name _____ **Hospital number**_____ **Date**_____

1. Start here

a. Assess pain intensity (please circle): none slight moderate severe

b. Give **SL (Sublingual) alfentanil** as per patients prescription chart and go to step 2.

2. After 10 minutes, assess:

a. Pain intensity:	none	slight	moderate	severe
b. Degree of pain relief:	not eased at all	eased only a little	eased moderately	completely relieved

c. If the pain intensity is 'none' or 'slight' and degree of pain relief is 'complete' or 'moderate' (and this is acceptable to the patient) then go to step 5. Note that alfentanil can wear off over 10 to 20 minutes, so warn the patient to call you if pain returns. [If pain returns, start a new sheet].

d. Otherwise give **SL alfentanil** again and continue to step 3

3. After 10 minutes, assess:

a. Pain intensity:	none	slight	moderate	severe
b. Degree of pain relief:	not eased at all	eased only a little	eased moderately	completely relieved

c. If the pain intensity is 'none' or is 'slight' and degree of relief 'complete' or 'moderate' (and is acceptable to the patient) then go to step 5.

d. Otherwise give **SL alfentanil** again and continue to step 4

4. After 10 minutes, assess:

a. Pain intensity:	none	slight	moderate	severe
b. Degree of pain relief:	not eased at all	eased only a little	eased moderately	completely relieved

c. If the pain intensity is 'none' or is 'slight' and degree of relief 'complete' or 'moderate' (and is acceptable to the patient) then go to step 5. Otherwise please discuss with medical staff since a change of dose (or a different approach) may be required.

5. Please ask the patient:

1. In relation to pain relief, how would you rate the overall performance of the spray?

poor fair good very good excellent

2. Compared to your usual medication for breakthrough pain, do you feel the spray was:

much worse slightly worse no different slightly better much better

3. Do they have any other comments about the spray? (please use the back of this sheet if necessary)

Chart B. Alfentanil for preventing pain

Form completed by_____

(i.e. use of alfentanil prior to painful procedures, movement or activity known to cause pain)

Patients name _____ **Hospital number**_____ **Date**_____

1. Start here: 10 minutes before activity or procedure

a. Assess baseline pain intensity (please circle): none slight moderate severe

b. If baseline pain is present (unless only slight and acceptable to the patient) then change to **Chart A** for relieving pain that is already present (delay activity or procedure).

c. If baseline pain is acceptable, give **SL (sublingual) alfentanil** as per patients prescription chart and go to step 2.

2. Start activity or procedure

a. If pain intensity remains acceptable throughout activity or procedure go to step 5

b. If pain intensity increases during activity or procedure go to step 3

3. If pain develops during activity or procedure, assess:

a. Pain intensity: none slight moderate severe

b. Give **SL alfentanil**, pause activity or procedure and go to step 4

4. After 10 minutes, assess:

a. Pain intensity: none slight moderate severe

b. Degree of pain relief: not eased at all | eased only a little | eased moderately | completely relieved

c. If pain is still unacceptable (i.e. pain intensity is 'moderate' or 'severe' and degree of relief 'none' or 'a little', repeat **SL alfentanil** at 10 minute intervals until:

- the pain control is acceptable, i.e. pain intensity is 'none' or is 'slight' and degree of relief 'complete' or 'moderate' (and is acceptable to the patient): recommence activity or procedure and go to step 5
- the patient has received SL alfentanil 2 further times (4 times including the doses at step 1 and 3): stop and discuss with medical staff since a change of dose (or a different approach) may be required.
- the patient appears drowsy or 'knocked off': stop and discuss with medical staff.

5. At the end of the procedure

a. If more than 2 doses were required or effective pain control was not achieved please discuss with medical staff since a change of dose (or a different approach) may be required.

b. Please record total number of sprays required for activity or procedure (including step 1 and step 3):_____

c. Please ask the patient if the spray made the activity or procedure more or less painful:

Much less Painful | Slightly less painful | Same | Slightly more painful | Much more painful

d. Please ask the patient how would they rate the overall performance of the spray in relation to pain relief?

poor fair good very good excellent

e. Do you or the patient have any other comments about the spray? (please use the back of this sheet if necessary)