Palliative care

Matt, Jan, Lucy, Katherine

Wednesday 13\textsuperscript{th} May 2015
Why?

• The average GP will have around 20 patient deaths per year

• Department of Health End of Life Care Strategy 2008
  • a number of significant issues affecting dying and death in England
    • People not dying where they chose to
    • Lack of dignity and respect
    • Variable access to quality end of life care across the country
    • Most people uncomfortable discussing death and dying

• In 2013, 80% of people surveyed wanted to die at home; 49% actually did
“How people die remains in the memory of those who live on.”

*Dame Cicely Saunders, founder of the modern hospice movement*
Session plan

• Discussions with the dying patient
• Forms to fill in
• People/services to involve in patients’ care
• Symptom control
• How to set up a syringe driver
• Cases to discuss in groups
Discussions & forms to fill in

Katherine
Discussions with the dying patient

- Advanced care planning
- Stage and progression of disease
- Prognosis
- Symptom control and management options
- Death, dying
- Bereavement
- Person centred care – physical, psychological, social, emotional, spiritual – patient and family
Discussion advice

• May need several discussions over a few weeks
• Maximise capacity
• Unhurried
• Give sufficient information
• Clarify to be certain of meaning
• Document well
• May need review
Tips from Reith lecture

• What is your understanding of where you are with your illness or condition at this time?
  • Need to say in own words
• What are your fears and worries for the future?
• What are your goals if time is short?
• What outcomes would be unacceptable to you?

• Need to find out people’s priorities and what they care about
Communicating well

• Communication Skills – being PREPARED
  • P- prepare for the discussion
  • R- relate to the person
  • E- elicit patient and carer preferences
  • P- provide information
  • A- acknowledge emotions and concerns
  • R- realistic hope
  • E- encourage questions
  • D- document
Advance care planning

- Linked with mental capacity act
- Advance statement eg PPC
  - What you want to happen
  - Not legally binding
- Advance decision to refuse treatment
  - Want you don’t want to happen
  - Legally binding if in writing, signed, witnessed, state refusal applies even if life is at risk
- Lasting power of attorney (LPA)
  - Property and financial affairs; health and welfare
  - Register with Office of the Public Guardian
  - Who will speak for you if you lose capacity
Advance Care Planning discussions

Advance Care Planning Discussion

What you do want
AS - Statement of wishes and preferences

What you don’t want
ADRT - Advance Decisions to refuse treatment ADRT and DNAR

Who will speak for you
Proxy spokesperson
LPOA - Lasting power of attorney

assess
the gold standards framework
Assess
Advance Care Planning Discussion

How?
- Opportunistic informal conversations
- Formalised systematic

What?
- What matters to you?
- What do you wish to happen?
- What do you do not want to happen?

Who?
- Named spokesperson (informal)
  Can tell those who act in best interests what sort of person you are
- Lasting Power of Attorney (formal)
  Can make legal decisions regarding your health

Where?
- Preferred Place of Care
- Carer’s Preferred Place of Care

Other?
- Special instructions-Organ/tissue donation
Forms to fill in

• Advance statement
• PPC – preferred priorities for care
• DS1500
• DNAR
• Emis / SystmOne templates
  • palliative care plan
  • admission avoidance
'Thinking Ahead' – GSF Advance Care Planning Discussion

We wish to be able to provide the best care possible for all patients and their families, but to do this we need to know more about what is important to them and what are their needs and preferences for the future.

The aim of any discussion about thinking ahead, often called an Advance Care Planning Discussion, is to develop a better understanding and recording of peoples’ priorities, needs and preferences and those of their families and carers. This should support planning and provision of care, and enable better planning ahead to best meet these needs. This philosophy of ‘hoping for the best but preparing for the worst’ enables a more proactive approach, and ensures that it is more likely that the right thing happens at the right time.

This example of an Advance Statement should be used as a guide, to record what the patient DOES WISH to happen, to inform planning of care. In line with the Mental Capacity Act (2005), this is different from a legally binding refusal of specific treatments, or what a patient DOES NOT wish to happen, which is called an Advance Decision (to refuse treatment) (ADRT).

Ideally an Advance Care Plan should be discussed to inform future care at an early stage. Due to the sensitivity of some of these issues, some may not wish to answer them all, or may quite rightly wish to review and reconsider their decisions later. This is a ‘dynamic’ planning document to be adapted and reviewed as needed and is in addition to Advanced Directives, Do Not Resuscitate plan, or other legal document.

Name: ___________________________ Date completed: _____________

Address: ___________________________ GP Details: ___________________________

DOB: ___________________________ Hosp / NHS no: ___________________________

Hospital contact: ___________________________

Family members involved in Advance Care Planning discussions:

Name: ___________________________ Contact tel: _____________

Name of healthcare professional involved in Advance Care Planning discussions:

Role: ___________________________ Contact tel: _____________

Patient signature ___________________________ Date: _____________

Next of kin / carer signature (if present) ___________________________ Date: _____________

Healthcare professional signature ___________________________ Date: _____________

Review date: _____________

1. At this time in your life what is it that makes you happy or you feel is important to you?

2. What elements of care are important to you and what would you like to happen in future?

3. What would you NOT want to happen? Is there anything that you worry about or fear happening?

4. Do you have a Legal Advance Decision to Refuse Treatment document? (This is in keeping with the Mental Capacity Act (2005) and enables people to make decisions that will be useful if at some future stage they can no longer express their views themselves)  No / Yes

If yes please give details (eg who has a copy?)

5. Proxy / next of kin

Who else would you like to be involved if it ever becomes difficult for you to make decisions or if there was an emergency? Do they have official Lasting Power of Attorney (LPoA)?

Contact 1 ........................................... Tel: ...................... LPoA Y / N
Contact 2 ........................................... Tel: ...................... LPoA Y / N

6. Preferred place of care

If your condition deteriorates where would you most like to be cared for?

1st choice ___________________________

2nd choice ___________________________

Comments ___________________________

7. Do you have any special requests, preferences, or other comments?

8. Are there any comments or additions from other people you are close to? (Please name)

NB See also any separate DNACPR/ADRT or ADRT documents

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Preferred Priorities for Care

What is this document for?
The Preferred Priorities for Care (also known as PPC) can help you prepare for the future. It gives you an opportunity to think about, talk about and write down your preferences and priorities for care at the end of your life. You do not need to do this unless you want to.

The PPC can help you and your carers (your family, friends and professionals) to understand what is important to you when planning your care. If a time comes when, for whatever reason, you are unable to make a decision for yourself, anyone who has to make decisions about your care on your behalf will have to take into account anything you have written in your PPC.

Sometimes people wish to refuse specific medical treatments in advance. The PPC is not meant to be used for such legally binding refusals. If you decide that you want to refuse any medical treatments, it would be advisable to discuss this with your doctors.

Remember that your views may change over time. You can change what you have written whenever you wish to, and it would be advisable to review your PPC regularly to make sure that it still reflects what you want.

Should I talk to other people about my PPC?
You may find it helpful to talk about your future care with your family and friends, although sometimes this can be difficult because it might be emotional or people might not agree. It can also be useful to talk about any particular needs your family or friends may have if they are going to be involved in caring for you. Your professional carers (like your doctor, nurse or social worker) can help and support you and your family with this.

When you have completed your PPC you are encouraged to keep it with you and share it with anyone involved in your care. Unless people know what is important to you, they will not be able to take your wishes into account.

Version 3 September 2013

Review date September 2015
Will my preferences and priorities be met?
What you have written in your PPC will always be taken into account when planning your care. However, sometimes things can change unexpectedly (like carers becoming over-tired or ill), or resources may not be available to meet a particular need.

What should I include in my PPC?
You should include anything that is important to you or that you are worried about. It is a good idea to think about your beliefs and values, what you would and would not like, and where you would like to be cared for at the end of your life.

People who should be asked about your care if you are not able to make a decision for yourself
You may have formally appointed somebody to make decisions on your behalf, using a Lasting Power of Attorney, in case you ever become unable to make a decision for yourself. If you have registered a Lasting Power of Attorney please provide their contact details below.

Name:
Address:

Telephone number:
Relationship to you:

Even if you have not registered a Lasting Power of Attorney, is there anybody you would like to be consulted about your care in the event that you are unable to make decisions for yourself? If so, please provide their contact details below.

Name:
Address:

Telephone number:
Relationship to you:
Your preferences and priorities

In relation to your health, what has been happening to you?

What are your preferences and priorities for your future care?
Where would you like to be cared for in the future?

Signature

Date

Please record any changes to your preferences and priorities here
(Please sign and date any changes)
Further information
You can use this page to make a note of any further information you need or questions you might want to ask your professional carers (like your doctor, nurse or social worker).

Contact details
You can use this page to record contact details of anyone who is involved in your care.

<table>
<thead>
<tr>
<th>Name</th>
<th>Relationship to you</th>
<th>Contact number</th>
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<tbody>
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</tbody>
</table>

This document was given to me by:
Name:
Organization:
Tel:
Email:

Further information about PPC is available at: [www.endoflifecare.nhs.uk](http://www.endoflifecare.nhs.uk)

Originated by Lancashire & South Cumbria Cancer Network June 2004 and endorsed by the NHS End of Life Care Programme.

Revised December 2007 by the National PPC Review Team

Version 3 September 2013
DS1500

• Issued to patients with terminal illness
  • ‘a progressive disease where death as a consequence of that disease can be reasonably expected within 6 months’

• Allows rapid claiming of benefits under special rules
  • Personal independence payment (PIP)
  • Attendance allowance
  • Employment support allowance (ESA)
DS1500 contd

• Report on
  • Diagnosis
  • Is the patient aware of their condition
  • Current and proposed treatment
  • Clinical features

• No guarantee of acceptance by DWP
  • Can appeal decision
DS1500

Doctor’s Report for Disability Living Allowance, Attendance Allowance or Incapacity Benefit to accompany your patient’s claim under Special Rules

THIS IS NOT A CLAIM FORM

Surname
Other names
Date of birth

Part 1 - Condition

What is the diagnosis?
Other relevant diagnoses?
Date of diagnosis?

Is the patient aware of their condition and/or prognosis?
YES ☐ NO ☐
If not, please tell us their address and address of their representative

Part 2 - Clinical Features which indicate a severe progressive condition (For example: rate of progression, recurrence, staging, tumour markers, CD4 count and viral load, bulbar involvement, respiratory and/or heart failure etc.)

Part 3 - Treatment

Please give details of relevant past or current treatment with dates including response (if not straightforward please state)

Is any other intervention or treatment planned which may significantly alter progression of the condition?

Declaration: the person named above is my patient. This is a full report of their condition and treatment. I have read and understand the notes on the completion of this form and I am satisfied that the form is appropriate. I am the patient’s:

Registered General Practitioner ☐
Hospital or hospice consultant ☐

Signature

Your name

Phone number

Address or FHSAs stamp

Date

DS1500
DO NOT ATTEMPT CARDIOPULMONARY RESUSCITATION

Adults aged 16 years and over
In the event of cardiac or respiratory arrest do not attempt cardiopulmonary resuscitation (CPR)
All other appropriate treatment and care will be provided

Name:
Address:
Date of birth: / / 
NHS number:

Date of DNACPR order: / / 

Reason for DNACPR decision (tick one or more boxes and provide further information)

☐ CPR is unlikely to be successful (i.e. medically futile) because:

☐ Successful CPR is likely to result in a length and quality of life not in the best interests of the patient because:

☐ Patient does not want to be resuscitated as evidenced by:

Record of discussion of decision (tick one or more boxes and provide further information)

Discussed with the patient / Lasting Power of Attorney [welfare]?
If ‘yes’ record content of discussion. If ‘no’ say why not discussed.

Discussed with relatives/carer/others?
If ‘yes’ record name, relationship to patient and content of discussion. If ‘no’ say why not discussed.

Discussed with other members of the healthcare team?
If ‘yes’ record name, role and content of discussion. If ‘no’ say why not discussed.

Healthcare professional completing this DNACPR order

Name: 
Position: 
Signature: 
Date: / / 
Time: 

Review and endorsement by responsible senior clinician

Name: 
Position: 
Signature: 
Date: / / 
Time: 
If DNACPR decision indefinite? Yes ☐ No ☐ If ‘no’ specify review date: / / 

Useful resources

• http://www.nice.org.uk/guidance/QS13
  • End of life care for adults


• http://www.goldstandardsframework.org.uk/
  • Earlier recognition of patients in last year of life
  • Better coordinated care in line with patients’ wishes
  • Reduced hospitalisation
  • More people living and dying where they choose
Useful resources 2

- [http://www.arthurrankhouse.nhs.uk/](http://www.arthurrankhouse.nhs.uk/)
  - Advice and factsheets
  - Documents to support ACP / PPC etc
  - Aims to help people talk more openly about dying
  - Help make plans for the end of life.
  - Set up by National Council of Palliative Care
- [http://www.macmillan.org.uk/](http://www.macmillan.org.uk/)
- [https://www.mariecurie.org.uk/](https://www.mariecurie.org.uk/)
Services to involve

Lucy
People to involve

- Macmillan nurse
- MDT coordinator to notify OOH if not using SystmOne
- District nurse
  - Syringe driver
- Day centre
- Hospice
How can hospices help?

Inpatient admissions:
   - End of life care
   - Complex symptom control
   - (funded respite)

Bereavement care for relatives
Day centre
Domiciliary visits
Clinical advice and support
Hospice at home
Specialist services available

- Clinical psychologist
- Occupational therapist
- Physiotherapist
- Family support team
- Lymphoedema specialist nurse
- Chaplain
- Patient affairs
- Complementary therapists
Palliative care tips 1

• Consider whether there is a reversible cause for symptoms.

• There can be reversible elements to symptoms (i.e. pain and agitation can be worsened by urinary retention and constipation).
Palliative care tips 2

• Before increasing doses of medications (especially opiates) consider whether they are actually helping-

• *Doses frequently get increased when the drug isn’t helping at all. They may need an alternative treatment or re-consideration of underlying cause.*
Palliative care tips 3

• Advance care planning is best done in advance!

• DNACPR, PPOC and PPOD etc are usually best discussed in advance (and recorded on SystmOne).
Palliative care tips 4

• If in doubt ask!

• *Hospices are happy to give clinical advice!*
Symptom control

Matt
Palliative Care Drugs
Contents

• Drugs for symptoms
  ➢ Pain
  ➢ Constipation
  ➢ Nausea and vomiting
  ➢ Breathlessness
  ➢ Appetite
  ➢ Agitation
  ➢ Secretions
  ➢ Depression
  ➢ Diarrhoea
  ➢ Hiccups
  ➢ Seizures
  ➢ Pruritis
  ➢ Mouth care
  ➢ Sweating
  ➢ Fatigue

• Anticipatory prescribing
  ➢ Diamorphine
  ➢ Midazolam
  ➢ Hyoscine
  ➢ Cyclizine
Pain
The concept of total pain

Total Pain

- Physical
- Psychological
- Social
- Spiritual
Pain

• Causes:
  - Direct invasion of cancer
  - Nerve pain
  - Bone pain
  - Liver pain
  - Raised ICP
  - Constipation
  - Mucositis
  - Pressure sores
Approach to pain

• Assessment
• Consider reversible causes
• Ask the patient regularly about their pain
• Record pain scores

• Pain relief as per WHO analgesic ladder
• Long acting pain relief
• Break through pain (1/?th of total 24hr morphine use)
WHO analgesic ladder

Step 1
Non-opioid (eg aspirin, paracetamol or NSAID) +/- adjuvant

Step 2
Weak opioid for mild to moderate pain (eg codeine) +/- non-opioid +/- adjuvant

Step 3
Strong opioid for moderate to severe pain (eg morphine) +/- non-opioid +/- adjuvant

Pain persisting or increasing
Pain controlled
Adjuvants to morphine

- NSAIDS
- Neuropathic drug classes
- Corticosteroids
- TENS
- Nerve block
- Muscle relaxants
- Bisphosphonates
- Ketamine
- Surgery
- Radiotherapy
Morphine Conversion Confusing
Weak opioids to strong opioids

Weak opioid
- Codeine 60mg
- Tramadol 50mg
- Nefopam 30mg

Strong opioid
- Oral morphine 5-10mg
- Oral morphine 5mg
- Oral morphine 10mg
Strong opioids to strong opioids

- 10mg oral morphine =
  - S/C morphine
  - S/C diamorphine
  - Oral oxycodone
  - Fentanyl patch
## Patchs

<table>
<thead>
<tr>
<th>24hr dose of oral morphine mg</th>
<th>Fentanyl patch mcg/hr</th>
</tr>
</thead>
<tbody>
<tr>
<td>30</td>
<td>12</td>
</tr>
<tr>
<td>60</td>
<td>25</td>
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<tr>
<td>120</td>
<td>50</td>
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<tr>
<td>180</td>
<td>75</td>
</tr>
<tr>
<td>240</td>
<td>100</td>
</tr>
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</table>

<table>
<thead>
<tr>
<th>24 hr dose of oral morphine mg</th>
<th>Buprenorphine patch mcg/hr</th>
</tr>
</thead>
<tbody>
<tr>
<td>30</td>
<td>20</td>
</tr>
<tr>
<td>60</td>
<td>35</td>
</tr>
<tr>
<td>120</td>
<td>70</td>
</tr>
</tbody>
</table>
Side effects of morphine

• A 70 year old patient with metastatic lung cancer is being treated with a slow release morphine preparation for pain relief. Which of the following is a recognised side effect of this treatment:
  
  A = excess salivation
  B = hyperthermia
  C = increased appetite
  D = jaundice
  E = urinary retention
Side effects of morphine

- Hypothermia
- Dry mouth
- Anorexia
- Paralytic ileus
- Taste disturbance
- Respiratory depression
- Reduced GCS
- Constipation
Constipation
Constipation

- Palliative care patients on opioids need a regular oral laxative.

- If there is a clinical picture of obstruction with colic, stimulant laxatives should be avoided.

- Avoid co-danthramer if patient is incontinent as it may cause a local skin reaction.

- Caution is needed with frail or nauseated patients who may not be able to tolerate the fluid volume needed along with Laxido.

- Bulk-forming laxatives are not suitable if the patient has a poor fluid intake and reduced bowel motility.

- Methyltnaltrexone may be suitable for opioid induced constipation resistant to standard therapies, but this should be under specialist palliative care advice only.
<table>
<thead>
<tr>
<th>Oral Laxative</th>
<th>Starting dose</th>
<th>Time to act</th>
<th>Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bisacodyl tablets 5mg</td>
<td>1-2 at night</td>
<td>6-12hrs</td>
<td>Abdo cramps</td>
</tr>
<tr>
<td>Senna tablets</td>
<td>2-4 at night</td>
<td>8-12hrs</td>
<td>Abdo cramps</td>
</tr>
<tr>
<td>Senna liquid</td>
<td>10-20mls at night</td>
<td>8-12hrs</td>
<td></td>
</tr>
<tr>
<td>Co-danthramer capsules</td>
<td>1-2 at night</td>
<td>6-12hrs</td>
<td>Colours urine red</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Contains dantron and softener</td>
</tr>
<tr>
<td>Co-danthramer liquid (1 capsule = 5mls)</td>
<td>5-10mls at night</td>
<td>6-12hrs</td>
<td>Anal irritation</td>
</tr>
<tr>
<td>Strong co-danthramer capsules</td>
<td>2 at night</td>
<td>6-12hrs</td>
<td></td>
</tr>
<tr>
<td>Strong co-danthramer liquid</td>
<td>5mls at night</td>
<td>6-12hrs</td>
<td></td>
</tr>
<tr>
<td>Docusate sodium 100mg</td>
<td>1 twice a day</td>
<td>24-36hrs</td>
<td>Softener</td>
</tr>
<tr>
<td>Macrogol e.g. laxido</td>
<td>1-3 sachets daily</td>
<td>1-3 days</td>
<td>Make up 125mls water</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>High dose 8/day</td>
</tr>
</tbody>
</table>
Nausea and Vomiting
Nausea and Vomiting

• Correct the correctable

• Non-pharmacological measures:
  • Constipation
  • Mouth care
  • Small palatable portions
  • Acupressure bands (seabands)
  • Accupuncture
  • Psychological approaches
• Pharmacological:
• Choose agent based on cause

<table>
<thead>
<tr>
<th>Cause</th>
<th>Agent</th>
<th>Dose</th>
</tr>
</thead>
<tbody>
<tr>
<td>Clinical toxicology/metabolic disturbance</td>
<td>Haloperidol, Levomepromazine</td>
<td>? 2.5-5mg S/C 12hrly</td>
</tr>
<tr>
<td>Motility disorders</td>
<td>Metoclopramide</td>
<td>10mg TDS PO or S/C</td>
</tr>
<tr>
<td>Intra-cranial disorders</td>
<td>Cyclizine, Dexamethasone</td>
<td>25-50mg TDS</td>
</tr>
<tr>
<td>Gastric/oesophageal irritation</td>
<td>PPI</td>
<td></td>
</tr>
<tr>
<td>Multifactorial</td>
<td>Cyclizine</td>
<td></td>
</tr>
</tbody>
</table>
• Ondansetron?

• Evidence only exists in palliative care in its use for chemotherapy and radiotherapy induced nausea and vomiting
Breathlessness
Breathlessness

• Check for superior vena cava obstruction
• Smoke free environment
• Use a fan or open window for ventilation
• Controlled breathing techniques
• 1\textsuperscript{st} line medication = morphine
• 2\textsuperscript{nd} line medication = benzodiazepines
• Oxygen?
Delirium and agitation

• Look for reversible causes and treat

• Medications:
  • Haloperidol
  • Benzodiazepines
Appetite
Appetite

• Often a worry for patients and their families

• Nutritional assessment
• Look for reversible causes e.g. oral candida

• Medications:

  ➢ Corticosteroids (prednisolone 30mg) – benefit short lived to 3-4 weeks
  ➢ Progestogens (Megestrol acetate 160mg)
  ➢ Prokinetics (metoclopramide/domperidone 10mg TDS)
Hiccups

“Guinness world record for hiccup attack = 68 years”
Hiccups

• Peppermint oil

• Antacid medication containing simeticone

• Prokinetic
Pruritis
Pruritis

• Systemic disease
• Medication
• Fungal infection in immunocompromised
# Pruritis

<table>
<thead>
<tr>
<th>Causes</th>
<th>1st line</th>
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<tbody>
<tr>
<td>Cholestasis</td>
<td>Rifampicin, sertraline, cholestyramine</td>
</tr>
<tr>
<td>Uraemia</td>
<td>Gabapentin</td>
</tr>
<tr>
<td>Lymphoma</td>
<td>Prednisolone</td>
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<tr>
<td>Opioid</td>
<td>Chlorphenamine</td>
</tr>
<tr>
<td>Paraneoplastic</td>
<td>Paroxetine</td>
</tr>
<tr>
<td>Unknown</td>
<td>Chlorphenamine</td>
</tr>
</tbody>
</table>
Anticipatory prescribing

• Pain
• Oral morphine
• S/C diamorphine
• Agitation
  • Midazolam
• Secretions
  • Hyoscine
• Nausea
  • Levomepromazine
  • cyclizine
  • Continue oral anti-emetic
Palliative care

• Circulation November 2013: **ICD Shocks in Dying Patients -- Disturbing Data from Beyond the Grave**

• “Death and dying... a shocking experience”
• “Death can go on and on and on and on...”
Palliative care

- Post mortem device interrogation of 130 ICDs between 2003 and 2010:
  - 35% had ventricular arrhythmias in the last 1 hour before death
  - 31% received a shock in the last 24hrs
  - some receiving >10 shocks in their final few hours
  - Of the 130 patients 65 had DNAR order yet 42 had ICD programmed as on

- DOI: 10.1161/CIRCULATIONAHA.113.006939
Who can I go to for help
• On-call Macmillan nurse – Wendy Dewey
• Palliative care consultant – Annalise Matthews
• Scottish palliative care guidelines
• BNF
Setting up a syringe driver

Jan
Syringe Drivers
Indications

• Loss of PO intake
• Repeated SC injections
• Symptom control e.g. intractable nausea

• Caution- impaired lymphatic drainage
How to set one up
**Continuous Subcutaneous Syringe Pump Prescription 1**

<table>
<thead>
<tr>
<th>Medicine</th>
<th>Initial dose over 24 hours</th>
<th>Dose/ Range over 24 hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>5mg</td>
<td>5mg - 60mg</td>
</tr>
<tr>
<td>B</td>
<td></td>
<td></td>
</tr>
<tr>
<td>C</td>
<td></td>
<td></td>
</tr>
<tr>
<td>D</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Diluent**

- **Water for Injection**
- **Sodium Chloride 0.9% Injection (delete)**

**Route**

- SC

**Additional instructions**

- JJ

**Administration Record**

- **Date**: 7/15/15
- **Start Time**: 13:00
- **Dose A**: 5mg
- **Dose B**: 1111
- **Dose C**: 1111
- **Dose D**: 1111
- **Total volume in syringe (ml)**: 18.6
- **Syringe size**: 20mls
- **Line primed Y/N**: Y
- **Rate displayed (ml/hr)**: 0.78
- **Battery %**: 100%
- **Site check (tick)**: V/Check

**Prescriber's signature**

- J. Jayawardena

**Start Date**: 7/15/15

**Time**: 13:00

**Continuous Subcutaneous Syringe Pump Prescription 2**

<table>
<thead>
<tr>
<th>Medicine</th>
<th>Initial dose over 24 hours</th>
<th>Dose/ Range over 24 hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td></td>
<td></td>
</tr>
<tr>
<td>B</td>
<td></td>
<td></td>
</tr>
<tr>
<td>C</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Administration Record**

- **Date**:
- **Start Time**:
Drugs

• Diamorphine, midazolam, haloperidol
• Max 3 in one SD
• Glycopyrronium “doesn’t count as a drug”
Giving set and syringe
<table>
<thead>
<tr>
<th>Patient</th>
<th>Ward</th>
</tr>
</thead>
<tbody>
<tr>
<td>Drug</td>
<td></td>
</tr>
<tr>
<td>Amount</td>
<td>Batch No.</td>
</tr>
<tr>
<td>Made By</td>
<td></td>
</tr>
<tr>
<td>Checked.</td>
<td></td>
</tr>
<tr>
<td>Diluent</td>
<td></td>
</tr>
<tr>
<td>Concentration</td>
<td>Total Vol.</td>
</tr>
<tr>
<td>Date/Time Prepared</td>
<td>Exp.Date/Time</td>
</tr>
</tbody>
</table>

**DRUG INFUSION VIA SYRINGE**

DISCONTINUE IF CLOUDINESS OR PRECIPITATE OCCURS
Problems

• Occlusion
• Catheter gets pulled out
• Bruising
• Site irritation- levomepromazine
Top tips

• Add water for injection to FP10
• Think about range of doses prescribed
• 1/6 of total analgesia = breakthrough pain PRN dose
• Warn family about communication
• District nurses and palliative care nurses
### Dosage Conversion between Opioids

*Based on chart from BNF section “Prescribing in Palliative Care”*

**This is a guide and a reference point and not intended as definitive equivalents**

<table>
<thead>
<tr>
<th>Oral Morphine</th>
<th>Parenteral Diamorphine</th>
<th>Transcutaneous</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Morphine oral solution or tablets mg every 4 hours</strong></td>
<td><strong>24 hour Total morphine mg over 24 hours</strong></td>
<td><strong>Oxycodone by continuous subcutaneous infusion mg over 24 hours</strong></td>
</tr>
<tr>
<td>5</td>
<td>40</td>
<td>15</td>
</tr>
<tr>
<td>10</td>
<td>60</td>
<td>20</td>
</tr>
<tr>
<td>15</td>
<td>100</td>
<td>30</td>
</tr>
<tr>
<td>20</td>
<td>120</td>
<td>45</td>
</tr>
<tr>
<td>30</td>
<td>180</td>
<td>60</td>
</tr>
<tr>
<td>40</td>
<td>240</td>
<td>90</td>
</tr>
<tr>
<td>60</td>
<td>360</td>
<td>120</td>
</tr>
<tr>
<td>80</td>
<td>480</td>
<td>180</td>
</tr>
<tr>
<td>100</td>
<td>600</td>
<td>240</td>
</tr>
<tr>
<td>130</td>
<td>800</td>
<td>300</td>
</tr>
<tr>
<td>160</td>
<td>1000</td>
<td>360</td>
</tr>
<tr>
<td>200</td>
<td>1200</td>
<td>400</td>
</tr>
</tbody>
</table>

**For doses above 300mg Morphine equivalent, take advice from a Specialist**

<table>
<thead>
<tr>
<th>Transcutaneous</th>
<th>Fentanyl patch micrograms per hour</th>
<th>Buprenorphine patch micrograms per hour</th>
</tr>
</thead>
<tbody>
<tr>
<td>-</td>
<td>35</td>
<td>-</td>
</tr>
<tr>
<td>-</td>
<td>52.5</td>
<td>35</td>
</tr>
<tr>
<td>15</td>
<td>25</td>
<td>25</td>
</tr>
<tr>
<td>30</td>
<td>25</td>
<td>25</td>
</tr>
<tr>
<td>45</td>
<td>50</td>
<td>50</td>
</tr>
<tr>
<td>60</td>
<td>75</td>
<td>75</td>
</tr>
<tr>
<td>90</td>
<td>100</td>
<td>-</td>
</tr>
<tr>
<td>120</td>
<td>125</td>
<td>-</td>
</tr>
<tr>
<td>180</td>
<td>175</td>
<td>-</td>
</tr>
<tr>
<td>240</td>
<td>225</td>
<td>-</td>
</tr>
<tr>
<td>300</td>
<td>275</td>
<td>-</td>
</tr>
<tr>
<td>Medicine</td>
<td>Syringe Driver Dose Range (continuous, s/c infusion over 24hrs)</td>
<td>PRN dose for breakthrough symptoms</td>
</tr>
<tr>
<td>----------</td>
<td>---------------------------------------------------------------</td>
<td>----------------------------------</td>
</tr>
<tr>
<td>Diamorphine</td>
<td><strong>For Opioid Naive patients 10-15mg</strong>&lt;br&gt;<strong>For patients already on opioids, see below.</strong></td>
<td>Divide 24 hour dose by 6&lt;br&gt;Give 2–4 hourly, 5mg, 10mg, 30mg, 100mg,</td>
</tr>
<tr>
<td>Alfentanil (2nd line, in renal impairment)</td>
<td>Discuss conversion to Alfentanil with a specialist team&lt;br&gt;Start at 1mg over 24 hours</td>
<td>Discuss conversion to Alfentanil with a specialist team</td>
</tr>
<tr>
<td>Cyclizine</td>
<td>150mg</td>
<td>(Max 150mg in 24hrs)</td>
</tr>
<tr>
<td>Metoclopramide</td>
<td>30 – 100mg</td>
<td>10 – 20mg tds</td>
</tr>
<tr>
<td>Haloperidol</td>
<td>1.5 – 5mg</td>
<td>1.5 – 5mg nocte</td>
</tr>
<tr>
<td>Levomepromazine</td>
<td>6.25 – 25mg</td>
<td>6.25 – 25mg od</td>
</tr>
<tr>
<td>Hyoscine Butylbromide</td>
<td>60 – 120mg</td>
<td>20mg tds</td>
</tr>
<tr>
<td>Midazolam (1st line)</td>
<td>10 – 20mg</td>
<td>2.5 – 5mg up to every 2 hours</td>
</tr>
<tr>
<td>Levomepromazine (2nd line)</td>
<td>25 – 100mg</td>
<td>12.5 – 25mg up to tds</td>
</tr>
<tr>
<td>Convulsions</td>
<td>Midazolam</td>
<td>10 – 60mg</td>
</tr>
</tbody>
</table>

BNF Ref

- **4.7.2**
- **4.6**
- **4.6**
- **4.2.1**
- **1.2**
- **15.1.4**
Case discussions
Case 1

• 76 year old lady
• Registered yesterday as temporary resident
• Moved to the area at the weekend to live with son and daughter-in-law
• Recent diagnosis of end stage pulmonary fibrosis
• Knows it’s terminal
• Doesn’t feel she’s had very good care with old GP

• Daughter-in-law requests a home visit as she is breathless
Questions

• What should be discussed in your first meeting with her?
• What other information do you need?
• Who else should be involved in her care?
• What forms need to be filled in?
• What could be prescribed for her?
• What else will you need to discuss with her and her family?
Case 2

• A 54 year old man with multiple sclerosis who you have known for many years deteriorates at home.
• He suffers from multiple chest infections, some of which in the past have required hospitalisation for IV antibiotics, and previous ITU admissions.
• You saw him 3 days ago and prescribed oral antibiotics, however they have not helped. He is now only just responsive to voice, and has obvious respiratory secretions.
• He has made an Advance Decision to Refuse Treatment that states he would not want to be re-admitted to hospital in the event of suffering from a further chest infection that wasn’t responding to oral antibiotics. He also has a DNACPR form.
You discuss the situation with him and his wife.

The patient’s speech has become progressively worse over the last few years due to his MS, and given his current condition it is even more difficult to understand.

However you manage to ascertain that he doesn’t want admission and wants to stop oral antibiotics.

His wife is understandably very distressed by the situation and feels on one hand she would like him admitted as his condition may be reversible but also wants to respect his wishes.
Questions

• What issues are raised by this case?
  • ADRTs, DNACPRs, communication difficulties, patient autonomy, relatives considerations, withdrawal of treatment

• How can you help his respiratory secretions?
  • Are they bothering him? If so consider Glycopyrronium, hyoscine, consider suction if appropriate.
• The patient remains at home and active care is withdrawn. His secretions settled well with a glycopyrronium syringe driver. However he has become more agitated and distressed.
• What reversible factors may be contributing to his agitation?
  • Consider pain, constipation, urinary retention, drugs, environmental factors

• How can you manage his agitation?
  • Manage reversible causes (i.e. analgesia for pain, catheterise if in retention),
  • Non-pharmacological i.e. peaceful environment, reassurance, support for family, spiritual care.
  • Pharmacological i.e. midazolam, haloperidol, levomepromazine

• Patient died at home peacefully after midazolam was added to syringe driver.
Case 3

• **Presentation**

• Helena presents at her GP surgery with worsening abdominal pain. The pain is mainly localised to the right upper quadrant of her abdomen and can vary in nature, but for the past 2 weeks has been present most of the time. It has prevented her from sleeping for the past 3 nights, and she feels exhausted.
• **Past medical history**
  
  • Helena is 68 and retired as a bus driver five years ago.
  
  • A year ago she was found to have a large abdominal mass, which was found to be an ovarian carcinoma. It was found to have spread throughout her peritoneal cavity at presentation and therefore a palliative treatment regimen was started.

  • Despite chemoradiotherapy, she developed widespread intraperitoneal lymph node involvement. A recent CT-scan showed four separate small masses in her liver, likely to be metastases. Recent blood tests including liver and renal function have been normal.

  • She has been taking two co-codamol 30/500 tablets four times a day, but they only had a limited effect. She has tried NSAIDs but cannot tolerate them as they give her severe epigastric discomfort.
• On examination
• She is not jaundiced but does look very tired.
• Her abdomen is distended and on palpating her liver the GP notes that it is enlarged.
• The area around her right upper quadrant is very tender, but there is no guarding or rebound tenderness.
Questions

• 1) She has been taking two co-codamol 30/500 tablets four times daily. What would you discuss with her about next steps specifically regarding pain management options?

• 2) What dose of morphine would you start her on?

• 3) When you mention the word morphine, she flinches and says “Oh no!” What would you discuss with her?
• 4) She has a lot of questions about morphine, including how often to take the medication and when to take breakthrough doses. She also wants to know what side effects to look out for. What would you do to provide her with more information?

• 5) Helena returns 2 days later and says that the pain control is working reasonably well, but that she is finding taking regular oral immediate-release morphine every 4 hours cumbersome. She says she has read the leaflets and would like to consider a sustained-release preparation. What would you do?
• 6) She returns several weeks later. Her sustained-release morphine has been titrated up to 30 mg twice daily and she is taking four additional doses of immediate-release morphine 10 mg as rescue doses for her breakthrough pain. Despite this, she remains in pain. She has also found that she is seeing shapes and figures appear and disappear. What action should you take?

• 7) What should you advise Helena about driving?
Case 4

• **Presentation**
  Maria is a 44 year old woman with metastatic breast cancer and spinal cord compression. She spends most of her time in bed.

• **Past medical history**
  - Asthma.

• **On examination**
  Maria reports that while being washed in bed she has particular issues with pain. Maria currently takes oral sustained-release morphine sulphate 5 mg 12 hourly. On assessing Maria’s pain it is clear that she does not just have pain when being washed in bed but at other times as well.
Questions

• 1) You suspect Maria may have breakthrough pain. What would your next step be?

• 2) Maria continues to have pain but now only when she is having a bed bath. What would you advise for Maria’s pain?
• 3) Maria begins to develop generalised pruritus coinciding with her increased dose of morphine. What would be your actions?

• 4) She is happy that her itching is better controlled, however she has started to feel nauseated but has not vomited. What would be your actions?
Any questions?