Prescribing for end of life care
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Associate Specialist in Palliative Medicine
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objective

• Illustrate why access to end of life drugs is important
• Give some guidance on which drugs are useful and how to prescribe them
• a common pitfall and how to avoid it
Rocket science?

- It is what you do all the time
- Prescribing
- The right drugs
- At the right time
Lady 90 years
Multiple co-morbidities  copd/pulmonary fibrosis AF osteoporosis frail
Two admissions to QEHW in 2012 for breathlessness
Inhaled treatment optimised
Patient did not wish to be admitted to hospital again
Looked after by two daughters and extended family
Referred palliative care- struggling with oral drugs, reduced appetite
Injectable drugs prescribed and available in house
Greenwich Care partnership support offered
District nurses visiting daily
Seen by GP each week
OOH handover forms completed
Episodes of confusion
Over period of 14 days patient deteriorated to point when on Friday
she was semiconscious, and in terminal phase
District nurses able to give small doses of midazolam and
glycopyrronium as bolus injection and then via a syringe driver
Died peacefully 48 hours later
Anticipatory prescribing in practice

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Why this is important

• Demographic time bomb of ageing population
• Deaths \( \uparrow 20\% \text{ to } 590,000/\text{yr by } 2030 \)
• 43\% \text{ of deaths will be in very elderly } 85 +
• 20\% \text{ of hospital bed days are used to care for the dying}
• Advanced care planning- many people express a wish to die at home
Access to end of life care drugs is important because ......

- When someone is dying the oral route of drug administration may be lost
- Symptom control can be maximised if injectable drugs are available immediately
- Reduces the OOH crisis
- Avoids distress of family leaving to go to pharmacy at a critical time
- Facilitates achieving preferred place of care
Policy directing practice

- 2008 end of life care strategy
- Gold standards framework GSF
- Liverpool Care Pathway LCP
- Advanced care planning
- Dying matters .org
- find your 1% of patients that will die each year
- Do you have a deathwish?
## Symptoms at the end of life

<table>
<thead>
<tr>
<th>Frequency %</th>
<th>Symptom</th>
</tr>
</thead>
<tbody>
<tr>
<td>56</td>
<td>Respiratory secretions and noisy breathing</td>
</tr>
<tr>
<td>51</td>
<td>Pain</td>
</tr>
<tr>
<td>42</td>
<td>Restless agitation</td>
</tr>
<tr>
<td>32</td>
<td>Urinary incontinence</td>
</tr>
<tr>
<td>22</td>
<td>Breathlessness</td>
</tr>
<tr>
<td>14</td>
<td>Nausea and vomiting</td>
</tr>
<tr>
<td>9</td>
<td>Confusion</td>
</tr>
</tbody>
</table>
Why use a syringe driver?

• A means of administering medication if patients are unable to reliably swallow
  – Unconscious
  – Total dysphagia
  – Vomiting
  – Confused
The 4 components

<table>
<thead>
<tr>
<th>Antiemetic</th>
<th>Analgesic</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sedative</td>
<td>Antisecretory</td>
</tr>
</tbody>
</table>
# antiemetics

<table>
<thead>
<tr>
<th>Drug Ampoule size</th>
<th>Oral dose</th>
<th>PRN s/c dose</th>
<th>24hr syringe driver dose</th>
<th>comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>Metoclopramide 10mg/2ml</td>
<td>10mg tds</td>
<td>10mg</td>
<td>30-40-60 mg</td>
<td>Up to 120mg Prokinetic Avoid in complete obstruction</td>
</tr>
<tr>
<td>Cyclizine 50mg/1ml</td>
<td>50mg tds</td>
<td>50mg</td>
<td>150mg</td>
<td>Do not mix with oxycodone or hyoscine</td>
</tr>
<tr>
<td>Levomepromazine 25mg/1ml</td>
<td>12.5mg od</td>
<td>6.25mg -12.5mg</td>
<td>12.5mg-25mg-50mg</td>
<td>Up to 100mg Broad spectrum antiemetic Sedative</td>
</tr>
<tr>
<td>Haloperidol 5mg/1ml</td>
<td>1.5mg od</td>
<td>1mg--2.5mg</td>
<td>2.5mg-5mg</td>
<td>Extrapyramidal side effects</td>
</tr>
</tbody>
</table>
# Sedative/relaxant

<table>
<thead>
<tr>
<th>Drug Ampoule size</th>
<th>Oral dose</th>
<th>PRN s/c dose</th>
<th>24hr syringe driver dose</th>
<th>comments</th>
</tr>
</thead>
</table>
| Midazolam 10mg/2ml | ----------- | 2.5mg-5mg    | 10-20-30mg               | Anxiolytic 5-10mg/24hrs  
Anticonvulsant 30mg/24hrs  
Sedative 20-100mg/24hrs |
# Antisecretory drugs

<table>
<thead>
<tr>
<th>Drug</th>
<th>Oral dose</th>
<th>PRN s/c dose</th>
<th>24hr syringe driver dose</th>
<th>comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>Glycopyrronium 200mcg/1ml</td>
<td>1mg</td>
<td>200microg</td>
<td>1.2-2.4mg</td>
<td>Longer duration of action</td>
</tr>
<tr>
<td>600mcg/3ml</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Hyoscine hydrobromide 400mcg/1ml</td>
<td>300microg</td>
<td>400mcg</td>
<td>1.2-2.4mg</td>
<td>May cause agitation</td>
</tr>
<tr>
<td>Hyoscine butyl bromide Buscopan 20mg/1ml</td>
<td>20mg qds</td>
<td>20mg</td>
<td>60-120mg</td>
<td>Antisecretory used in bowel obstruction</td>
</tr>
</tbody>
</table>
## Analgesics

<table>
<thead>
<tr>
<th>Drug Ampoule size</th>
<th>Oral</th>
<th>s/c prn dose</th>
<th>Syringe driver dose /24 hours</th>
<th>Conversion from oral to s/c</th>
</tr>
</thead>
<tbody>
<tr>
<td>Morphine 10mg/1ml 30mg/1ml</td>
<td>10mg 4hrly</td>
<td>5mg 4hrly</td>
<td>20mg-30mg</td>
<td>Half oral dose</td>
</tr>
<tr>
<td>Morphine 10mg/1ml 30mg/1ml</td>
<td>5mg 4hrly</td>
<td>10mg-15mg</td>
<td>One third oral morphine dose</td>
<td></td>
</tr>
<tr>
<td>Oxycodone 10mg/1ml 20mg/2ml</td>
<td>5mg 4hrly</td>
<td>2.5mg 4hrly</td>
<td>10mg</td>
<td>Half oral dose</td>
</tr>
<tr>
<td>Alfentanil 1mg/2ml</td>
<td>---------------</td>
<td>--------------</td>
<td>1mg—2mg</td>
<td>10 x potency of diamorphine Use if renal failure</td>
</tr>
</tbody>
</table>
How much morphine in the syringe driver?

- MST 30 mg bd = 60mg orally / 24 hours
- Sub cutaneous morphine is half oral dose
- \( \frac{1}{2} \times 60 = 30 \text{mg over 24 hours} \)
How much oxycodone in syringe driver?

- Oxycontin 20mg bd = 40mg orally / 24 hours
- Sub cutaneous oxycodone is half oral dose
- ½ x 40 = 20mg over 24 hours
How much diamorphine in syringe driver?

- MST 30mg bd = 60mg orally/ 24 hours
- s/c diamorphine is third oral morphine dose
- 1/3 x 60= 20mg over 24 hours
Calculating dose of analgesia for syringe driver

• Remember to include extra doses of breakthrough medication – e.g. oramorph
• If patient is on analgesic patches best practice is to continue with patch and add small dose of analgesia in syringe driver because......
Fentanyl 150x potency of morphine

Fentanyl 25mcg/hr

every 3 days

= 1 ½ Bottles of oramorph
<table>
<thead>
<tr>
<th>Morphine</th>
<th>Fentanyl</th>
</tr>
</thead>
<tbody>
<tr>
<td>45 mg daily</td>
<td>12 patch</td>
</tr>
<tr>
<td>90 mg daily</td>
<td>25 patch</td>
</tr>
<tr>
<td>180 mg daily</td>
<td>50 patch</td>
</tr>
<tr>
<td>270 mg daily</td>
<td>75 patch</td>
</tr>
<tr>
<td>360 mg daily</td>
<td>100 patch</td>
</tr>
</tbody>
</table>
Audit ideas

• Use of palliative care register
  – Standard – 20% of all deaths were of individuals on the register
  – Where deaths occurred in patients on the register, whether recognition of the terminal phase was timely?
  – Proportion of patients with non-malignant disease on register to be 20% +
  – (cancer accounts for 25% of all deaths)
Further advice?

BNF – excellent information in palliative care prescribing section

Local specialist palliative care providers

Greenwich and Bexley Community Hospice
0208 320 5837 (community team)
0208 312 2244 (main reception)
End of life prescribing

Symptom control
Avoiding an OOH crisis
Facilitating patient choices for place of care
A good death?

- Symptom control
- Avoiding an OOH crisis
- Facilitating patient choices for place of care
Come and visit us

- Hospice Open Day
- Saturday 13\textsuperscript{th} October
- 12-4pm
- 185 Bostall Hill
- SE2 0GB