Medicines Optimisation in End of Life Care

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Our Vision:
To lead out-of-hospital community healthcare
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End of life - statistics

Around 500,000 die in England & Wales each year
- 2/3 over 75 years

Cancer
Heart disease
Stroke
Chronic respiratory disease
Neurological disease
Dementia

Proportion of deaths in England by place of death (2010)

- Hospital 53%
- Home 21%
- Care Home 18%
- Hospice 5%
- Other 2%
End of life care

• Complex area
  – Practical difficulties
  – Ethical dilemmas

• We only have one chance to get it right

• High quality holistic care for people nearing the end of their life
The Liverpool Care Pathway

The Liverpool Pathway to death: how the NHS is dressing up palpable evil as kindness

1st November 2012

Cancer mum denied chance to say goodbye because doctors did not try to keep her alive

Hospitals bribed to put patients on pathway to death

District nurse put my father on death pathway - in his own home

Daily Mail, October 12, 2012

October 26

The Telegraph

October 30
End of life care – patient group

- Advanced incurable conditions
- Advanced age
- General frailty
- Existing conditions
- Life-threatening acute conditions

- Duration:
  - days, months, years
- Begins when needed
- Continues for as long as is needed
Pharmacy related issues

Medicines optimisation in patients with Palliative Care needs

• Remember
  – Changes in drug handling

• Ensure
  – Rationalisation
  – Symptom control
Regular review required as condition deteriorates
Changes in drug handling

Liver impairment

Problems mainly occur in patients with jaundice, ascites or encephalopathy
Changes in drug handling – liver impairment

• Metabolism of drugs
• ↓ synthesis of
  – clotting factors
  – proteins
• Encephalopathy

• Hepatotoxic drugs
Changes in drug handling

Renal impairment

• ↑ toxicity from ↓ excretion
• ↑ sensitivity
• Poorly tolerated side effects
• ↓ efficacy

• Nephrotoxic drugs
Medicines Optimisation in Palliative Care patients

Problems with multiple prescribed medicines

- Adverse effects
- Drug interactions
- Adherence to regime
The problem

- GP, 74yr old male
- Worsening aortic stenosis
- Ongoing interstitial lung disease
- Right sided sharp, episodic chest pains for the past 4 months
- LRTI, small right sided pleural effusion
- SOB
- Cardiology/ respiratory/ palliative care teams
Regular medicines on admission (1)

- Furosemide 80mg OM
- Clopidogrel 75mg OD
- Nicorandil 10mg BD
- Spironolactone 50mg OM
- Azathioprine 50mg OM
- Prednisolone 10mg OM
- Lansoprazole 30mg BD
- Symbicort turbohaler 400/12 2 puffs BD
- Terbutaline turbohaler 500mcg 2 puffs BD
- Co-amoxiclav 625mg TDS started today
- Oxygen 2litres/min continuously
Regular medicines on admission (2)

- Fentanyl patch 12micrograms/hr every 3 days
- Lidocaine patch 5% 1 OD
- Paracetamol 1g QDS
- Quinine sulphate 300mg ON
- Alendronic acid 70mg weekly (Thursdays)
- Adcal D₃ 1 BD
- Ropinirole 2mg OM and 7mg ON
- Sertraline 100mg OM
- Solifenacin 10mg OD
- Trimethoprim 100mg ON
- Senna 2 ON
As required medicines on admission

- Macrogol compound 2 BD/PRN
- Glyceryl trinitrate spray 1-2 PRN
- Codeine 30mg QDS/PRN

- 22 regular medicines 😞
Medicines Optimisation - Rationalisation

• Minimal prescribing

• Appropriate prescribing
  – Analgesics, laxatives, anti-emetics
  – Anticoagulants, benzodiazepines
  – Anti-infectives

• Need for therapy
  – Anti-hypertensives, Hypoglycaemics
  – Statins, Calcium supplements
Medicines Optimisation - Adherence

• Tablet burden
  – OD or BD doses
  – SR preparations

• Drug formulations
  – Dysphagia/Feeding tubes
  – Orodispersible/Soluble/Liquid
  – Alternatives to the oral route
Medicines Optimisation – Symptom control

Maintain symptom control when
• deteriorating condition
• dysphagia
• malabsorption
• weakness
• ↓ level of consciousness

Consider
• response to medicines
• need for medicines
• route of administration
Medicines Optimisation – Symptom control

Continuous subcutaneous infusion of medicines via syringe driver
Medicines Optimisation – Symptom control

Combination of medicines may be required

- **Analgesic**
  - Morphine, (Diamorphine), Oxycodone, Alfentanil, Ketorolac, Ketamine

- **Anti-emetic**
  - Cyclizine, Haloperidol, Metoclopramide, Ondansetron, Levomepromazine

- **Sedative**
  - Midazolam, Levomepromazine

- **Anti-convulsant**
  - Midazolam

- **Anti-secretory**
  - Glycopyrronium, Hyoscine butylbromide, Octreotide
Medicines Optimisation – Symptom control

PRN subcutaneous injections for patient comfort and relief of specific symptoms at appropriate dose

• Analgesic
• Anti-emetic
• Anxiolytic
• Anti-secretory
Medicines Optimisation – end of life
Useful references

• Office of national statistics [www.ons.gov.uk](http://www.ons.gov.uk)

• Palliative Care Formulary 4th edition [www.palliativedrugs.com](http://www.palliativedrugs.com)

• Dickman et al
  The Syringe Driver 3rd edition 2011

• The Liverpool Care pathway for the dying patient [http://www.mcpcil.org.uk/](http://www.mcpcil.org.uk/)
Medicines Optimisation – End of Life

Workshop - patient scenario