Pharmacist Led COPD Clinics

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Background

- Initially pilot project
- Funding secured from evidence showing clinical and cost effectiveness
- GGC wide
- Once all identified patients have been seen pharmacist offers clinic to another practice
Patients unable to attend offered house visit
Nursing home pharmacist reviewing patients when identified
Clinic completed in 1 practice
Clinics being run in 3 practices at present
Holistic review of all medication
Clinic Standards

- Assess symptom control/functionality on current therapy
- Assess appropriateness of therapy against guidelines
- Assess inhaler technique
- Assess appropriateness of inhaler device/dose
Clinic Standards cont.

- Address over-ordering/concordance
  - 50% chance that patients don't follow the prescribed directions for some/all of their medicines.
  - Prevents patients from getting the best effect of treatments.
  - Waste of resources
Clinic Standards cont.

- Discuss smoking cessation
- Synchronise quantities of repeat medication
- Record interventions
- Consider onward referral
  - Pulmonary Rehab
  - GP
  - Dietician
  - Smokefree etc.
Guidelines

○ NHS GGC Primary Care COPD Guidelines used in clinic
○ Pharmacological treatment stepwise approach
  • Short-acting beta agonist
  • Still symptomatic Tiotropium
  • Still symptomatic Long-acting β2 agonist (LABA)
  • If 2 or more exacerbations per year and FEV1<50% give combination of LABA and ICS
An initial trial of one month of each inhaled therapy to assess response. If benefit continue. If no clear benefit withdraw treatment.

Treatment of exacerbation

- Step up SABA
- Prednisolone 30mg daily for 7-14 days
- Antibiotic only if purulent sputum – Amoxicillin or Clarithromycin
**NHS GGC Primary Care COPD Guidelines**

**First Revision 2000**

**IDENTIFICATION AND DIAGNOSIS**

- Persistent cough, sputum and/or breathlessness
- Arrange spirometry to confirm and assess severity – outreach spirometry referral form (GG only)
- Arrange chest X-ray at initial presentation (useful for later comparison if required)
- Distinguish from asthma (see note 1 over)

**DISEASE REGISTER**

All patients with FEV1/FVC < 70% with FEV1 < 80% predicted past bronchodilators should be on COPD register. All on register should be offered annual review.

**Classification**

- mild – 50 – 80% predicted FEV1
- moderate – 30–49% predicted FEV1
- severe – <30% predicted FEV1

All patients on register should have functional assessment (see note 2 over) as this affects therapeutic decisions.

**INITIAL ASSESSMENT AND ANNUAL REVIEW WHEN STABLE**

- Functional ability/breathlessness scale (see note 2 over)
- Ask about occupational dust or fume exposure
- Smoking status – offer referral if appropriate
- BMI – record – advice as appropriate (see below)
- Medication review (see below) including inhaler technique
- Consider chest X-ray and/or repeat lung function assessment if unexpected change in symptoms or change in MRC grade (see GP referral below)
- Reinforce action to be taken if acute exacerbation including self management plan if appropriate (see note 3 over)
- Consider psychological morbidity – treat according to NICE guidelines for anxiety/depression
- Consider pulmonary rehabilitation if appropriate and agreed with patient
- Consider osteoporosis screening in patients maintained on greater than 1000mg/day of calcium and or vitamin D or equivalent if other risk factors apply e.g. repeated courses of oral steroids, Immobility, low BMI. See NICE guidelines for further information.

**HOSPITAL OUT-PATIENT REFERRAL**

Consider hospital out-patient referral if:

- Age <40 years
- Never smoked occasional smoker
- Diagnostic uncertainty e.g. symptoms disproportionate to lung function at initial assessment or follow-up
- Severe symptoms or signs of cor pulmonale (e.g. ankle swelling; MRC Grade 4/5) or FEV1 <30%
- Unintentional weight loss – for CXR. (Thoracic) Consider investigation to exclude other causes
- If considering nebulised treatments or oxygen

**TREATMENT**

**Pharmacological**

**Symptoms**:

- (see "trials of drugs for symptomatic relief" overleaf – do not continue any drug if no clear benefit)
  - Short-acting B2 agonist
  - If still symptomatic, add a long-acting anticholinergic
  - If still symptomatic, add a long acting B2 agonist

**Inhaled steroids**

- If two or more exacerbations per year and FEV1 < 50% (may need repeat spirometry) give a combination of a long acting B2 agonist and inhaled corticosteroid. Continue longterm.

**Ensure adequate inhaler technique**

- Metered dose inhalers should be tried first in Step 1
- See NHS CCG Formulary for individual choices
- Patients should not be started on nebulised treatments unless agreed with consultant

**Mucolytics**

- In chronic productive cough, consider trial of carbocysteine 750mg tds. (see "trials of drugs for symptomatic relief" overleaf – do not continue any drug if no clear benefit)
  - Pattern of symptoms suggests asthma e.g. wheeze, nocturnal waking
  - Non-smoker
  - 15% bronchodilator or steroid response in FEV1, see asthma guidelines

**NOTE 1: DIAGNOSIS – COPD OR ASTHMA?** Remember that asthma and COPD can coexist.

**Consider asthma as a possible diagnosis particularly if**

- Pattern of symptoms suggests asthma e.g. wheeze, nocturnal waking
- Non-smoker
- 15% bronchodilator or steroid response in FEV1, see asthma guidelines

**NOTE 2: FUNCTIONAL ABILITY/BREATHLESSNESS SCALE**

It remains clinically helpful to assess limitation, due to breathlessness, based on the traditional MRC grading of 1 to 5. This is a validated marker of disease severity irrespective of patient's FEV1. Grade 3 and above – offer referral to pulmonary rehab.

- Grade 1: Diagnosis of COPD but not restricted in usual daily activity
- Grade 2: Copes with daily activity but some difficulty keeping up with peers – especially hills and stairs
- Grade 3: Restricted activity out-of-doors – unable to keep up with peers on the level
- Grade 4: Marked limitation in outdoor activity – stables and inclines with great difficulty. Self caring indoors
- Grade 5: Essentially housebound and requires some assistance in personal care

**NOTE 3: TREATMENT OF EXACERBATION OF COPD**

Defined as an acute onset of increase in breathlessness, cough or sputum production, or change in sputum colour, sustained for at least 3 days.

1. Step up current short acting B2 agonist
2. Inhale prednisolone 30mg/day for 7-14 days
3. Antibiotic only if purulent sputum – Amoxicillin 500mg tds or Clarithromycin 500mg bd for 7 days
4. If you offer self-administered antibiotics, consider a written plan reflecting the above

**NOTE 4: TRIALS OF DRUGS FOR SYMPTOMATIC RELIEF**

These drugs help some but not all, patients with COPD. An initial trial of one month is suggested with symptomatic assessment of response. If the patient responds, continue treatment. If no clear benefit, withdraw treatment to test effect of withdrawal.

**NOTE 5: PALLIATIVE CARE**

- If on maximum doses of initial/inhaled treatment (+ O2 if hypoxic) and still dyspnoea consider morphine 1.25mg orally 3-4 hourly. May need larger doses if not tolerated.
- If patient agitated or anxious, consider lorazepam 500 micrograms sublingually or diazepam 2mg orally 3-4 hourly.
- Excessive secretion (take care to avoid the discomfort of a dry mouth) e.g. hyoscine 0.6mg 4-6 hourly
- Oxygen may reduce confusion. If not successful, Chlorpromazine 25-50mg or haloperidol 1-3 mg orally 8 hourly may ease confusion and restlessness.
Example of Interventions

- Referral - Pulmonary Rehab
- DEXA scan
- Smokefree
- GP – exacerbation of COPD
- Practice Nurse
- Dietician

- Change of inhaler device
- Commencing spacer device
Example of Interventions cont.

- Commencing new inhaler therapy – Tiotropium, LABA.
- Rationalising inhalers
- Considering licensed indications + cost of inhaler devices
  - Switch from Seretide 250 Evohaler 2 puffs bd to Seretide 500 Accuhaler (licensed for COPD) saves £222 per annum per patient
Example of Interventions cont.

- Step-wise withdrawal of ICS according to Respiratory MCN guidance in appropriate patients.
- General cost minimisation
- Prescribing Indicators
- Commencing simvastatin in patients with JBS 2 10year CVD risk > 30%
- Ordering blood tests i.e. Theophylline level
Example of Interventions cont.

- Address over-ordering/concordance
  - Difficult to assess
- Input appropriate data into SPICE screens
- Patient education
- **If a new medication is commenced patient is followed up to assess benefit**
Prescribing Issues Highlighted from Clinics

- Treatment for exacerbation of COPD does not always include Prednisolone (as per GGC Guidelines)
- Patients being prescribed ICS not in combination with LABA (MHRA warning).
- Choice of steroid inhaler - only Seretide 500 Accuhaler and Symbicort Turbohaler licensed in COPD.
Questions