

QIPP Detail Aid

Providing support for quality in prescribing

SALBUTAMOL – DOES IT REALLY NEED TO BE NEBULISED?

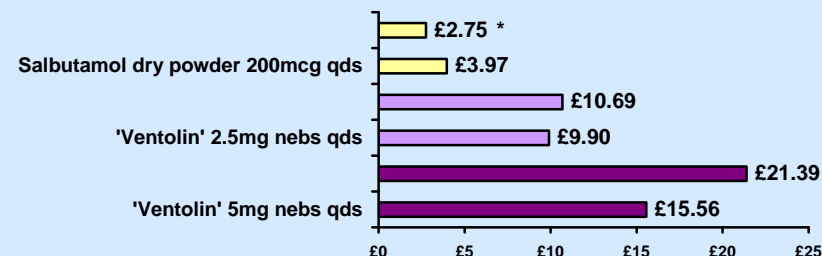
WHAT IS THE PROBLEM?

- Salbutamol delivered by nebuliser is often used long term in patients with moderate-severe COPD. It is more expensive than inhalers and maintenance of the equipment adds to the overall cost. Only about 10% of a nebulised dose of salbutamol is delivered to the airways using this method, comparable with doses delivered using an inhaler with a spacer.
- In the last year over 52,000 prescriptions for salbutamol nebules were issued in the East Midlands at a cost of £363,000. If half of patients had used their hand held inhalers instead, over £180,000 would have been available to spend on other treatments. Based on one county's figures, there are around 2000 patients per million population using nebulisers (not all for COPD), at an estimated annual cost of about £100,000 for maintenance and consumables.

MAJOR CONSIDERATIONS

- Salbutamol given by nebuliser is often used in patients with more severe forms of COPD and may be preferred by some who claim that it relieves breathlessness. There is little objective evidence to support this. One trial in patients with COPD found that relief of breathlessness lasted on average less than 45 minutes and may have been related to a cooling effect on the face.¹
- NICE guidance for COPD² advises that in most cases, bronchodilator therapy is best delivered using a hand-held inhaler device. Spacers can often be helpful in ensuring effective delivery of the dose as they reduce the need for co-ordination of actuation and inhalation of the aerosol.
- NICE guidance² also says that COPD patients should not continue on nebulised treatment without assessment and confirmation that at least one of the following occurs: a reduction in symptoms; an increase in ability to undertake activities of daily living; an increase in exercise activity, or an improvement in lung function.
- Nebulisers and associated equipment need regular cleaning and servicing. The mask, nebuliser and tubing should be washed at least daily (this is often not done) and need replacing at intervals³. The compressor used to drive the nebuliser should also be serviced annually.²

WHAT ARE THE COSTS?



Costs for 30 days supply (MIMS/Drug Tariff, Nov 2015).

These costs do not include servicing of compressor, or replacements of mask, nebuliser or tubing for nebulised treatment.

* includes cost of Volumatic spacer replacement 3 times a year.

KEY MESSAGES

- Salbutamol administered by nebuliser delivers only a small fraction (around 10%) of the dose to the airways. Patients with COPD should be able to get comparable bronchodilatation using hand held inhalers (using a spacer for metered dose inhalers).**
- Nebulised salbutamol costs around 5-10 times the cost of similarly effective doses delivered by inhaler. Nebulised treatment also incurs significant costs for compressor, nebuliser chamber, masks and tubing, in addition.**
- NICE guidance for COPD advises that unless there is a confirmed improvement in symptoms, daily activities, exercise activity or lung function, nebulised salbutamol treatment should not continue. For those that do need to continue, Ventolin brand nebules are currently cheaper.**

1. Poole P et al. Respir Med 2005; 99:372-6.

2. NICE guidance on COPD (2010, currently under review) at <https://www.nice.org.uk/guidance/cg101/chapter/1-Guidance#managing-stable-copd>

3. EMIS: [www.patient.co.uk. Nebulisers in general practice at http://patient.info/doctor/nebulisers-in-general-practice](http://patient.info/doctor/nebulisers-in-general-practice)