

# Inhaled colistimethate (Colomycin<sup>®</sup>)

**Pseudomonas lung infection in patients with bronchiectasis (non-cystic fibrosis).**

## Specialist details

Name: \_\_\_\_\_  
Location: \_\_\_\_\_  
Tel: \_\_\_\_\_

## Patient identifier

Date: \_\_\_\_\_

## Introduction

This guideline refers to the shared care arrangements for colistimethate sodium in the treatment of *Pseudomonas aeruginosa* lung infections by INHALATION ONLY and specifically to the proprietary brand Colomycin<sup>®</sup> (Forest Laboratories).

Reconstituted colistimethate injection is nebulised for local treatment of *Pseudomonas aeruginosa* lung infection in patients with bronchiectasis. This is commonly used (as per BTS guidelines 2010, NICE 2014) for eradication or chronic suppression of *Pseudomonas aeruginosa* and is an off-label indication for Colomycin<sup>®</sup>.

## Adult dosage and administration

Usual dosage and administration

Children > 2 years and adults:

Eradication: 1-2 million units twice daily via nebuliser for 3 months.

Chronic suppression: 1-2 million units twice daily via nebuliser on a continuous basis.

Colistimethate sodium powder is dissolved in 2-4 mL of:

- Sodium chloride 0.9% nebuliser solution or
- Salbutamol 2.5mg nebuliser solution (this is outside the product license for Colomycin<sup>®</sup>) or
- Water for injection (plastic amps).

Colistimethate can be administered through a variety of nebuliser systems. There are a range of suitable systems available including eg. Salter Aire Plus compressor with the Salter Nebu Tech HDN nebuliser; and Porta-neb with Ventstream.

(Any other inhaled drugs should be administered before Colomycin<sup>®</sup>).

Preparations available:

- Colomycin<sup>®</sup> powder for solution for injection, infusion or inhalation is available in a 10ml vial with a 'flip-off' cap. Strengths available are: 1 million, 2 million units/vial. Colomycin<sup>®</sup> vials are available to community pharmacies from their normal wholesalers.
- Other formulations of colistimethate are available but are either:
  - not licensed for use for inhalation (e.g. the non-proprietary Beacon product)
  - or are supplied only by secondary care due to procurement arrangements (eg. Colobreathe<sup>®</sup> [NICE TA176])
  - or are not able to be used via the trusts provided nebulisers (eg. Promixin<sup>®</sup> which should only inhaled through an I-neb nebuliser).

## Hospital specialist responsibilities

- Assess suitability of the patient for inhaled Colomycin<sup>®</sup> and perform the test dose.
- Provide patient/carer with relevant information on use, side effects and need for monitoring of treatment.
- Ensure the patient has access to, or information on how to access, a suitable nebuliser and compressor with required sundries. There are a range of suitable systems available including eg. Salter Aire Plus compressor with the Salter Nebu Tech HDN nebuliser; and Porta-neb with Ventstream.
- Train the patient/carer in the use of the nebuliser system.
- Arrange shared care with the patient's GP, specifying Colomycin<sup>®</sup> brand and advising on diluent required.
- Disease monitoring: undertake regular sputum samples and respiratory function monitoring.
- Drug monitoring: not applicable as systemic absorption is negligible via the inhaled route.
- Continue to review patient at agreed specified intervals, sending a written summary to the GP whenever the patient is reviewed.
- Stop treatment when no longer considered to be appropriate.
- Provide any other advice or information for the GP if required.

## GP responsibilities

- There is no drug monitoring required for this treatment.
- Prescribe Colomycin<sup>®</sup> brand and diluent required as requested by specialist. Where doses of 2 million units are required please ensure the prescription is written for 2 million unit vials (and not 2 x 1 million units).
- Continued prescribing is appropriate for patients attending specialist review.
- Report any adverse reactions to the initiating specialist, and the usual bodies (eg. MHRA/CHM).

## Adverse effects, precautions and contraindications

This shared care guideline refers to treatment by INHALATION ONLY. Transpulmonary absorption of colistimethate is generally considered to be negligible and therefore without the potential side-effects and need for monitoring of the systemic route. However, the possibility of systemic absorption should always be borne in mind when treating patients by inhalation.

- Inhalation may induce coughing or bronchospasm.
- Bronchospasm may be reduced by preparing with water for injection rather than sodium chloride 0.9% for nebulisation, or may be prevented or treated with appropriate use of nebulised salbutamol. If troublesome, treatment should be withdrawn.
- Sore throat or mouth has been reported and may be due to *Candida albicans* infection or hypersensitivity.
- Skin rash may also indicate hypersensitivity, if this occurs treatment should be withdrawn.
- Taste disturbances, nausea, vomiting, dysphonia, thirst, and hypersalivation have also been reported with inhaled treatment.
- Colistimethate sodium should be used with caution in patients with myasthenia gravis and only if clearly needed.
- Colistimethate sodium should be used with extreme caution in patients with porphyria.

## Common drug interactions

As transpulmonary absorption of colistimethate is generally considered to be negligible, there are no recorded drug interactions when nebulised.

## Communication

For any queries relating to this patient's treatment with nebulised colistimethate, please contact the specialist named at the top of this document.

This information is not inclusive of all prescribing information and potential adverse effects.  
Please refer to full prescribing data in the SPC or the BNF

Date prepared June 2017

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