**INFORMATION FOR PATIENTS**

**How to administer nebulised Gentamicin**

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<th>General information about nebuliser therapy</th>
<th>How to prepare the Gentamicin for nebulisation</th>
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<td>This leaflet provides information about the use of nebulised Gentamicin. It is not intended to replace talking with medical or nursing staff.</td>
<td>Wash your hands first.</td>
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<td>Inhalation (breathing medication into the lungs) via a nebuliser and compressor system is an excellent delivery technique. It allows treatment to be delivered directly where it is needed, into the lungs and airways.</td>
<td>You will need to prepare the following on a clean surface:</td>
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<td>The fine mist created by a nebuliser allows particles of medication to be breathed in efficiently to reach the small airways of the lungs.</td>
<td>- A vial of Gentamicin, 5ml ampoule of Sodium Chloride, 0.9% nebuliser chamber, mouthpiece, filter set, syringes, needles and yellow sharps bin.</td>
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<td><strong>Why do I need nebulised antibiotic treatment?</strong></td>
<td>Nebulised Gentamicin should be administered through a closed circuit with a filter. It should not be given in a normal nebuliser circuit used for other medications.</td>
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<td>It is used in the treatment of chronic infection of the airways. Gentamicin injection may be given by nebulisation and, although it is not specifically licensed for the use in patients with bronchiectasis, there is much experience in its use.</td>
<td>Check the vial of Gentamicin is the prescribed dose and the use by date is still in date.</td>
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<td><strong>Are there any procedures I need to do prior to treatment?</strong></td>
<td>Use an ampoule breaker to snap off the top off the Gentamicin ampoule (you will be shown this when you have your first dose of nebulised Gentamicin).</td>
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<td>Your chest should be cleared of secretions prior to taking the nebulised antibiotic. Your physiotherapist can show you how to do this if you are not sure.</td>
<td>Draw up the Gentamicin liquid using the syringe provided and pour into the nebuliser chamber.</td>
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<td></td>
<td>Add then 2 ml of 0.9% Sodium Chloride to the nebuliser Chamber.</td>
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<td></td>
<td>Assemble the rest of the nebuliser equipment and filter system as demonstrated when you had your first dose of nebulised Gentamicin and start nebulising.</td>
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Dispose of your sharps in the yellow sharps bin provided.

**How to administer inhaled Gentamicin**
- It is advisable to nebulise Gentamicin in your own room with the door shut and window open
- If your compressor works from mains electricity, connect the supply lead to the machine socket and plug into the mains supply
- Connect the nebuliser pot and expiratory filter to the compressor with the tubing supplied
- Switch on and breathe slowly in and out with the mouthpiece in your mouth
- Treatment is finished when the nebuliser begins to spit
- When finished, safely dispose of the used Gentamicin vial, the Sodium Chloride vial, syringe and needle into the Yellow Sharps bin provided by your Respiratory Nurse
- Wash your hands.

**To gain the most benefit from your medication**
The following steps should be followed:
- Sit comfortable in an upright position
- Mouthpieces should be used to help efficient drug delivery and prevent any mist irritating the eyes
- Seal your lips around the mouthpiece and breathe through your mouth
- Breathe at a rate which is comfortable
- Do not talk while using your nebuliser
- If a short break is required at intervals, you can switch off the compressor and start again when ready
- When nebulising antibiotics, a filter/valve set should be used to prevent possible environmental contamination
- Rinse mouth after every dose of nebulised antibiotic.

**Will this affect my other medication?**
- The nebulised antibiotic is poorly adsorbed through the lung into the bloodstream and therefore should not affect any other medication taken.

If you normally take Ventolin (Salbutamol) then you should continue to take this before the antibiotic as shown on your initial assessment.

**Are there any side effects?**
You will have been given a test dose of nebulised Gentamicin by the Respiratory Nurse to ensure you do not experience chest tightness or difficulty with breathing while inhaling the antibiotic.

**Before you start:**
- Take your reliever inhaler or nebuliser (Salbutamol/Ventolin) as prescribed at least **20 minutes before** inhaling the Gentamicin.
Having started the course, if you experience any symptoms of increase wheeze, chest tightness or difficulty with breathing you should immediately:

- **STOP** the nebuliser
- Take your **RELIEVER** inhaler or nebuliser (Salbutamol/Ventolin) as prescribed
- If this is severe and does not improve with Salbutamol, go to the Accident and Emergency Department at your local hospital or phone for an ambulance
- **Inform your Respiratory Nurse at the earliest opportunity.**

**How long will I have to take the antibiotic?**
If the antibiotic does not cause side effects, your doctor may want to continue and you may need long-term treatment. Usually your consultant will want to review things after a few months before deciding on the length of treatment. Some patients stay on the antibiotic indefinitely. Further sputum testing may be done to see if the infection is still present. It may not be completely eradicated.

**What equipment will I need?**
You will need a compressor, nebuliser for the antibiotic and filter kit. This equipment will be provided at your initial assessment. You will also been given syringes, needles, ampoule breaker and a yellow sharps bin for the needles and glass ampoules after they have been used.

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**Cleaning the nebuliser**
Pseudomonas germs love a warm moist environment. If you do not clean the nebuliser equipment properly, germs will thrive. Please clean the equipment as follows:

- It is important to keep your nebuliser clean and dry. A small amount of drug always remains in the medication container after treatment. This can block the nebuliser jets if it is not cleaned.
- After every use disconnect the nebuliser from the tubing and turn on the compressor for a short period to clear any moisture from the tubing.
- Remove the tubing and the mouthpiece from the nebuliser. Unscrew all the parts of the nebuliser.
- Wash the nebuliser pot and mouthpiece in hot soapy water. Rinse under hot running water to clear the fine jets. Allow to dry thoroughly.
- It is essential the nebuliser parts are completely dried before they are reassembled.
- Always follow the instruction sheet included in the nebuliser equipment pack on how to clean the sidestream plus reusable nebuliser with filter kit equipment.
- The sidestream plus reusable nebuliser with filter kit system will last for 12 months and will need to be changed after this time. This will be reviewed by your Respiratory Nurse.
Care of the compressor
- Always keep your compressor on a firm surface, and not on the carpet or floor, to avoid dust being drawn in.
- Regularly wipe clean with a damp cloth.
- The compressor should be serviced every 12 months. Your Respiratory Nurse will arrange this for you.

Ordering more medication and equipment
Once at home you will need to get a repeat prescription from King’s Mill Hospital for the Gentamicin and sodium chloride. You will have to order a supply of filters, syringes and needles using the contact details provided for the Respiratory Nurses.

Filter pads
These must be changed every time after using the nebuliser and see your Respiratory Nurse for further supply.

Who will monitor my treatment/progress?
The consultant who prescribed this treatment will monitor your progress. Your GP will monitor your general health, report any adverse reactions that may occur.

Contact details
Respiratory Specialist Nurse
Cardio-Respiratory Department (Clinic 4)
King’s Treatment Centre
King’s Mill Hospital
Sutton-in-Ashfield
Telephone 01623 622515
Ext 6831, 3541 and 6324
Monday to Friday, 9am–5pm.

Useful information
British Lung Foundation
73 – 75 Goswell Road
London
EC1V 7ER

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Further sources of information
NHS Choices: www.nhs.uk/conditions
Our website: www.sfh-tr.nhs.uk

Patient Experience Team (PET)
PET is available to help with any of your comments, compliments or concerns and will ensure a prompt and efficient service.

King’s Mill Hospital Tel: 01623 672222
Newark Hospital Tel: 01636 685692
Email: PET@sfh-tr.nhs.uk

If you need this information in a different language or format, please contact the Patient Experience Team as above.

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If you require a full list of references for this leaflet, please email patient.information@sfh-tr.nhs.uk or telephone 01623 622515 ext 2715.

All of our hospitals are smoke free and as such you will not be able to smoke anywhere on site including the car parks, pathways and grounds. Please speak to a member of staff if you would like to stop smoking. We can offer advice and refer you to services that support smokers who want to cut down or stop completely.

To be completed by the Communications office
Leaflet code: PIL3323
Created: Feb 2016 / Review Date: Feb 2018