

Nebulised Tobramycin, Tobi[®] therapy for non-cystic Bronchiectasis

Your doctor has prescribed an antibiotic in a nebulised form to treat **pseudomonas**. This leaflet gives you information about the treatment and how to administer it. If you need any further assistance you can contact the Respiratory Nurse Specialist in Bronchiectasis on the number at the end of this leaflet.

What is pseudomonas?

Pseudomonas is a bacteria that can cause chest infections, particularly in people with weakened immune system. The bacteria is normally found in soil and water.

What is nebulised therapy?

Nebulised therapy is when medicine is given to you through a device that is called a nebuliser.

A nebuliser turns the medicine into a mist so it can penetrate your lungs better. The medicine gets broken down into smaller particles that can then reach the smaller and more difficult to reach areas of your lungs.

It is more effective because it can help you receive a higher concentration of your medicine that acts directly in your lungs. In this case the medicine will be antibiotics.

What is the name of the antibiotic that is going to be used and why do I need it?

The name of the antibiotic that your doctor has prescribed is Tobramycin also known as Tobi®. It is the second line of treatment for pseudomonas.

Research has shown that if you suffer from conditions such as bronchiectasis or Cystic Fibrosis, treatment with inhaled antibiotics can help reduce the number of exacerbations, helping your lungs stay healthier.

In some cases, nebulised antibiotics will eliminate the pseudomonas altogether. But sometimes pseudomonas can be very difficult to eradicate and your doctor will decide to give you a course of intravenous antibiotics.

What are the common side effects of nebulised therapy?

The most common side effect is chest tightness or difficulty in breathing. This is called bronchospasm (the narrowing of your airways). This is why the first dose will be given to you in hospital, and to prevent this side effect from happening, your doctor will ask you to take inhaled salbutamol before each nebulisation. If you are not on inhaled salbutamol we will show you how to use it and ask your GP to prescribe it for you.

However, if this side effect becomes a problem this will mean that you are unable to have Tobi® and your doctor will discuss the use of other nebulised antibiotics (such as amikacine).

If your chest becomes tight when you are at home you can stop the antibiotics for 2-3 days. If these symptoms get better it is likely that the nebulisers are the cause. Let us know as soon as possible as this will mean that you need another antibiotic or a review in the treatment.

Other side effects include:

- A sore throat or mouth could also be caused by nebulised antibiotics. It could be related to infection or hypersensitivity. If this happens contact the respiratory team on the number below.
- A skin reaction. If this happens stop the nebuliser and contact the respiratory team
- Coughing
- Voice alteration
- Hoarseness
- Tinnitus (ringing of the ears)
- Increased phlegm,
- Headache
- Chest pain
- Sputum discolouration and haemoptysis (blood in the phlegm).

How will I get the first dose of medication?

As explained above, your first dose will be given in hospital. To make sure the nebulised antibiotic is suitable for you, we will perform what we call a nebuliser trial in the hospital.

We will ask you to come in to the Respiratory Clinic on the second floor of the Barry Building, Royal Sussex County Hospital.

The trial will start by performing a baseline spirometry (a test to assess the function of your lungs). The next step will be to give you a medicine called a bronchodilator (salbutamol or ventolin®) to help open up your airways. This will normally be given in the form of an inhaler.

If you normally take this inhaler it would be useful if you could bring it with you on the day of the trial.

Then we will give you the nebulised antibiotic, which would last about 10-15 minutes.

Right after the administration of the nebuliser we will repeat a spirometry test. We will let you rest for 20 minutes and will perform a last spirometry to evaluate the effects of the nebulised antibiotic.

If the spirometer shows less than 10% bronchoconstriction then we will be able to prescribe the medication for you.

If you are from the Brighton and Hove area (including Portslade and Saltdean) we will arrange the Community Respiratory Service (CRS) to lend you a nebuliser device which you will need to collect from Brighton General Hospital. They will be able to explain how to mix the medication and prepare the nebuliser if you have any problems.

If you are from outside Brighton, when you come to the Royal Sussex County Hospital we will give you the equipment and teach you how to use it. This is because not all the areas have got a CRS who can provide nebulised therapy.

The first month of Tobramycin will be prescribed by our doctors at the Royal Sussex County Hospital and will need to be collected from Pharm@Sea, attached to Outpatients department. The following prescriptions can be prescribed by your GP.

How long will I need to be on this antibiotic?

Tobramycin needs to be taken on alternate months. You will be taking the nebuliser for 28 days and resting for another 28 days for six months. This makes up a total of 3 months on treatment and 3 months off treatment.

After this time we will repeat a sputum sample and you will be reviewed in clinic by one of the respiratory doctors. Some people need to be on Tobramycin for a longer period of time, but this will be decided in your review.

The usual dose will be 300mg twice a day and they come in already made plastic ampoules. They also need to be stored in the fridge.

It is important that you take your medicine as prescribed by your doctor.

If you have any concerns or any questions you can contact your Bronchiectasis Clinical Nurse Specialist on the following number or email address:

07387 259261

bsuh.respnurses@nhs.net

You can leave a message on the answerphone which is attended to daily, Monday to Friday.

Useful websites:

- <https://www.nhs.uk/conditions/bronchiectasis/treatment/#antibiotics>
- <https://www.blf.org.uk/support-for-you/pseudomonas>
- <https://www.blf.org.uk/support-for-you/nebulisers/what-is-it>

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