



Guidelines for nebulising antibiotics

Your child/young person has been prescribed an antibiotic to help reduce bacteria in their lungs. It's recommended the antibiotic is given twice daily after chest physiotherapy clearance. TOBI, IV Tobramycin and Colistin are common antibiotics used for people with CF(PWCF).

About nebulised antibiotics

- TOBI and Colistin are funded in NZ for use by PWCF on a prescription endorsed with cystic fibrosis. Both antibiotics are available from a community pharmacy.
- Give with a Venturi breath-activated nebuliser, eg PARI LC SPRINT Nebuliser.
- If the child is old enough to use a mouthpiece, use a PARI Filter/Valve Set with filter pad.
- Use a nose clip when using a mouthpiece.
- For younger children who can't use a mouthpiece, use a mask (eg PARI BABY Mask with BABY Bend or PARI Starfish Mask). If a mask is used, a Filter/Valve set can't be used, and parents are advised to wear a N95 mask to protect themselves against inhaling the antibiotic.
- Always use the full dose as prescribed.
- Nebulising time should be 10–15 minutes – nebulise until nebuliser is dry or “spluttering”.
- Nebulise in a well-ventilated room.
- Nebulised antibiotics are generally prescribed for twice daily use.
- Give the first dose under medical supervision in hospital setting in case of adverse reactions.

Order of inhaled medication

1. Salbutamol MDI with spacer, wait at least 10 minutes.
2. Chest physiotherapy as per physiotherapist instructions (eg hypertonic saline & PARI PEP-S or chest percussion).
3. Nebulise antibiotic.
4. Other inhaled medication eg steroid MDI.
5. Pulmozyme (generally given daily at night – follow physiotherapist advice). Ensure 30 mins between nebulised antibiotic and Pulmozyme.

Equipment

- Medium output compressor eg PARI BOY SX or PARI BOY mobile S.
- Breath-activated nebuliser eg PARI LC SPRINT Nebuliser.
- PARI Filter/Valve set with filter pads (used for children who can use a mouthpiece).
- Nose clip.
- Syringes/needles for Colistin and IV Tobramycin.
- For young children, use a mask eg PARI Starfish Mask or PARI BABY Mask with BABY Bend.
- Normal saline (0.9%) 10ml vials used with Colistin.

TOBI 300mgs/5mls

About TOBI

- TOBI is approved for use in CF for children aged 6 and older, endorsed cystic fibrosis patient on prescription.
- One ampule contains 300mgs in 5ml as a single dose.
- The dose is not adjusted for weight; all patients receive one ampule twice daily.
- Don't dilute with normal saline.
- Store in refrigerator at 2–8°C and store in original package to protect from light.
- TOBI pouches can be stored up to 25°C for up to 28 days once removed from the fridge.
- TOBI should not be mixed with other inhaled medications.
- Once opened, give the whole dose and throw away any remaining contents. Do not reuse.

Colistin (Colistimethate sodium) 150mgs per vial

About Colistin

- Colistin is available in powder form in a vial.
- It's approved for use for people with CF, endorsed cystic fibrosis patient on prescription.
- Once reconstituted each vial provides 150mgs of Colistin.
- Reconstitute powder in vial with normal saline 0.9%.
- Single use only: once reconstituted and amount needed withdrawn, discard vial.
- Usually part of 150mg dose given; 150mg vial will need to be reconstituted first.

Making up a dose of 150mg Colistin

1. Open the Colistin vial by peeling off the lid.
2. With a syringe and needle draw up 4mls normal saline 0.9% and place into the Colistin vial.
3. Roll the vial between your hands (don't shake) until all the powder has dissolved to liquid.
4. Using the same syringe and needle draw up 4mls of Colistin.

Making up a dose of 75mgs Colistin

1. Reconstitute Colistin to 150mgs as above.
2. With a syringe and needle draw up 2mls of Colistin.
3. Add 2mls normal saline (0.9%) to syringe.
4. Total volume 4mls.

Making up a dose of 37.5mgs Colistin

1. Reconstitute Colistin to 150mgs as above.
2. With a syringe and needle draw up 1ml of Colistin.
3. Add 3mls normal saline (0.9%) to syringe.
4. Total volume 4mls.

