CF Guidelines - Spirometry

Spirometry in Cystic Fibrosis:

All patients over the age of 5 should have regular lung function testing. This should include FEV_1, FVC, FEV_1/FVC, PEFR, FEF25-75. This should be done as a minimum every three months during clinic visits. Spirometry should also be performed at the start, midway and at the end of every IV antibiotic treatment and at any other time deemed appropriate.

Guidelines for performing spirometry:

- Spirometry should be performed in a well ventilated room away from other CF patients.
- Spirometry should be performed in the sitting position (or standing if the patient prefers).
- Inpatient spirometry should be performed in the patients own room with the door shut.
- Patients should be encouraged to wash or disinfect their hands before using the spirometer.
- Always use a separate bacterial filter for each patient.
- All filters should be disposed of in clinical waste after each patient.
- The spirometer should be cleaned between each patient as specified by local infection control policy.
- All spirometers should be cleaned, dried and maintained according to local policies.
- All spirometers should be re-callibrated according the manufacturers instructions.

Plymouth Paediatric Team Only:

It is not practical to have separate spirometers according to patient's bacterial status; however the following guidelines should be adhered to regarding the changing of the turbines to reduce the risk of cross infection between patients:

- Patients with either Burkholderia cepacia, Multi-Resistant Pseudomonas Aeruginosa, MRSA or Stenotrophomonas maltiphilia will all have their own turbine.
- Individual turbines will be identified for use with either Pseudomonas negative or Pseudomonas positive patients.
- Turbines should be cleaned according to local infection control policies.
- Spirometers should be calibrated every time a new turbine is used.

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