# What to know about Spirometry!

# **Information and Instructions for the Patients**

Spirometry is one of the most performed breathing tests. It can be called as simple breathing test. This test measures the amount of air we breathe out in one deep/big breath. It is based on a simple breathing technique and can be performed using a specialized medical instrument, called spirometer.

It is indicated in many problems and diseases which affect lungs. It is needed when a person experiences chronic/long term cough, breathlessness, chest tightness, wheezing or excessive sputum production.

Once a chronic lung disease is established, spirometry is also used to monitor the status of the diseases. It is commonly used in diagnosis and monitoring of **asthma**, smoking related lung diseases (COPD), **interstitial lung diseases** (in which the lung tissue get hardened) and many environmental exposures related lung diseases (like black lung due to coal dust exposure).

# Spirometry procedure:

In our Australian Polyclinic we follow these steps to perform a spirometry.

- The patient will sit comfortably in a chair in an exam room.
- We may place a nose clip on patient's nose to keep both nostrils closed.
- The patient will take a deep breath in, and then exhale as hard as the patient can into the tube called spirette placed in spirometer as shown in the picture.
- The procedure is repeated at least three times to make sure that results are consistent, especially if there is a lot of variation between test results.
- The entire appointment may last for about 30 minutes.



# Instructions to Follow before the Breathing Tests (0-2 weeks) Very Important, read carefully

If you are taking any inhaler/puffer or nebulized medicine, check with your referring doctor or our clinic at the time of appointment whether these inhalers need to be stopped before the tests and for how long. It varies greatly from person to person and results may change which may require repeat testing.

We do not usually stop inhalers for spirometry if we want to establish that your lung disease is under control. In other words, you should continue your puffers in that case, and we will perform the test.

If we want to know that a person has lung disease or not, in that case, usually we need to stop any inhalers. Timing can vary from usually 6-8 hours for Ventolin, 48 hours for any preventers. If we are performing bronchial provocation test or bronchial challenge test, we have to stop all the preventer puffers at least 2 weeks prior to the test. Ideally Ventolin cannot be used for 24 hours prior to the challenge test.

You should bring an updated list of your medicines and bring all inhalers including Ventolin (if you are taking them) along with spacer (if you have one) to the appointment so that we can check the technique, to make sure that you are using them in right fashion to get the most benefits out of these devices.

### **Results of Spirometry:**

We usually classify the results of spirometry into obstructive and restrictive spirometry. We further grade the abnormality into mild, moderate, and severe disease based on the results of spirometry. We usually tell you the informal results of spirometry, but formal report will be issued later, usually within 24 hours.

### About Australian Polyclinic:

Our breathing sleep clinics are managed by Australian trained pulmonologist and sleep physician. We can assess any lung related problems, do appropriate investigations, and manage it accordingly in international stands. We have established first private sector pulmonary function test laboratory in Lahore where we can perform not only simple spirometry but also diffusion capacity, lung volumes and other pulmonary function tests.

Australian Polyclinic is situated in DHA Phase 5 CCA, Lahore. You can explore and learn more about our services at <u>www.australianpolyclinic.com</u>

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