

FREQUENCY OSCILLATION TESTING (FOT)

This is a modern and relatively unique method of looking at airway narrowing. It capitalizes on the fact that different sound wave frequencies (low pitch to slightly higher pitch sounds) travel different distances along the airway. The lowest of these travels the furthest. When this test is carried out multiple low variable sound wave frequencies are sent down the airways and the time to travel down and reflect back are measured. This then provides information on what is happening along the full length of the airway.

This test is carried out at rest with gentle breathing and so the airways are not subject to the physical forces that occur when individuals undertake a forced maneuver (breathing out as fast as possible).

Normal population data has been most extensively collected for Very Low Pitch sound (5Hertz) and for slightly higher pitch sounds (20 Hertz). Below 20 hertz is not audible to humans. As such, we use the results from these two frequencies (R5 & R20) to provide information on the resistance to air flow for the full length of the airway (R5) and for the first third of the airways, ie the larger airways, (R20). The difference of these two readings also inform us about the lungs' smaller airways which are hard to measure by other means.

The additional value of this test is that it does not require any special effort from the patient. The patient is simply asked to hold their cheeks and to breathe normally for a few minutes. If it is your first ever test you may be asked to repeat the test after having taken an inhalation of a 'Ventolin' equivalent puffer. It is much simpler than other tests (eg Spirometry) that are used more commonly in assessing air flow. Combining the information from spirometry and FOT provides a much more powerful assessment of your airway pathology.

Patient Preparation

Medication Withholding

If this is your first visit to The Lung Health Clinic, please avoid using:

- Ventolin, Asmol, Airomir, Bricanyl,: for **6 hours** prior to your appointment time.
- Atrovent for **12 hours** prior to your appointment time
- Seretide, Symbicort, Serevent, Oxis, Foradile, Flutiform, Bretairis Genuair:
For **18 hours** prior to your appointment time.
- Onbrez, Seebri, Spiriva, Ultibro, Breo Ellipta, Incruse, Anoro,Trelegy and Spiolto for **36 hours** prior to your appointment time.

Please continue to use all other inhalers(s)/puffers(s) and oral steroid medications as usual.

IMPORTANT: if you are unwell and experiencing symptoms, please use your usual rescue medication (eg. Ventolin, Asmol, Airomir, Bricanyl etc) and telephone The Lung Health Clinic to discuss.

If this is a follow-up visit to The Lung Health Clinic, please continue to take all your respiratory medications as usual unless you have specifically been requested to withhold.

Cigarette Smoking

If you are a cigarette smoker, please avoid smoking on the day of your test.

Strenuous Exercise

Please avoid vigorous or strenuous exercise on the day of your test.

Typical Test Time

15minutes

Questions

If you have any questions, please do not hesitate to contact The Lung Health Clinic.