PEAK PULMONARY FUNCTION LABORATORIES

Toll-free : 1-833-738-PEAK(7325) | Toll-free : 1-855-738-PEAK(7325) | peakmedicalgroup.ca

Methacholine Challenge Test (Bronchial Provocation)

Adult Patient Information

If you have any questions regarding the test or your appointment, please call 1-833-738-7325

Purpose: Methacholine challenge testing (MCT) is one method of assessing how responsive the airways are in your lungs. Increased airway responsiveness is one of the features that may contribute to a diagnosis of asthma. MCT is most often considered when asthma is a possibility and other testing, most notably spirometry, have not established or eliminated the diagnosis. Symptoms that suggest asthma include wheezing, shortness of breath, chest tightness, or cough (ATS Guidelines for Methacholine and Exercise Testing – 1999).

Procedure: This test will take 60 to 90 minutes to perform.

1. In the Pulmonary Function Lab, the Respiratory Therapist will do a breathing test on you to make sure that your results are within acceptable limits prior to starting the actual procedure.
2. If the first test is normal, you will move onto the second test where you will inhale a control solution of saline for 1 minute. Testing will continue at intervals of 30 seconds and 90 seconds.
3. If results remain normal, you will inhale a drug called Methacholine for a period of 1 minute. Once again, testing will continue at intervals of 30 seconds and 90 seconds.
4. There may be up to 10 levels of this drug given through inhalation along with testing.
5. Testing will continue until a 20% change is noted on the breathing test or until you have completed the highest level of Methacholine.
6. As the testing progresses, you may experience some minor symptoms, such as a cough or chest tightness. However, most patients have no symptoms.
7. At the conclusion of the test, you will be given a short-acting bronchodilator (Ventolin/salbutamol) to inhale and asked to rest for another 15 minutes (this inhaler will reverse any adverse reaction, if any, to the Methacholine).
8. A repeat test will be performed to ensure that your results have returned to your baseline.
9. Once you are feeling well, you will be allowed to leave.

If you have had a chest cold in the last 6 weeks prior to your test, please rebook your appointment.
If you are pregnant or breastfeeding, please call to rebook your appointment.

Preparation: It is essential that you withhold the following medications prior to your test:
If you have any concerns or questions with the following test preparations, please contact our office at 1-833-738-7325

DO NOT TAKE FOR 7 DAYS PRIOR TO TEST	Spiriva, Seebri, Tudorza , Ultibro, Incruse, Anoro, Inspiolto, Duaklir, Trelegy, Breztri, Enerzair, prednisone(speak to doctor before discontinuing prednisone)
DO NOT TAKE FOR 3 DAYS PRIOR TO TEST (72 HOURS) *antihistamines*	Altarax (hydroxyzine), Reactine or Zytec (cetirizine), Allegra, Seldane, Claritin, Triaminic, Tavist, Benedryl, Chloro-Tripolon, Dristan, Dimetane, Drixoral, Optimine, Ornade, Polarmine, Pyribenzamine, Sine-Off, Sudefed Plus, Actifed, Coricidin, Periactin and Phenegran
DO NOT TAKE FOR 2 DAYS PRIOR TO TEST (48 HOURS)	Advair, Symbicort, Zenhale, Serevent, Oxeze, Foradil, Onbrez, Breo, Atectura, Wixela
DO NOT TAKE FOR 1 DAY PRIOR TO TEST (24 HOURS)	Singulair, montelukast, Accolate, Atrovent, Combivent Theophylline (Theodur, Quibron, Uniphyl, etc.)
DO NOT TAKE FOR 8 HOURS PRIOR TO TEST	Ventolin, Salbutamol, Apo-Salvent, Airomir, Bricanyl, Berotec
DO NOT TAKE/SMOKE ON THE DAY OF THE TEST	Drink/eat Caffeine products (coffee, tea, cola drinks, chocolate) Smoke Cigarettes/Vape/Marijuana (within 1 hour of appointment) Drink Alcohol (within 4 hours of appointment)