

Inhaled Mannitol Challenge Test

Respiratory Centre

What is Mannitol?

Mannitol is a naturally occurring sugar which when inhaled in small doses under controlled conditions mimics the body's response to an allergen. When inhaled by people with over sensitive airways Mannitol causes the airway to narrow. This narrowing is monitored by performing a simple breathing test (Spirometry).

Why am I having this test?

Your consultant has requested this test which will be performed in the Respiratory Centre by a registered Clinical Physiologist.

The Mannitol challenge is a test to determine if your airways are over-sensitive. Oversensitivity can be caused by inflammation and is a feature of Asthma.

What are the benefits of having this test?

This test will help your Consultant to confirm or rule out a diagnosis of Asthma. Asthma can be difficult to diagnose with a basic lung function test. This test is specific in identifying Asthma.

How long will it take?

Please allow up to 60 minutes for your appointment.

What does the test involve?

The procedure will be explained to you in detail on the day of the test. We will check that you are happy to proceed. A baseline breathing test will be completed first. You will be asked to inhale increasing doses of Mannitol through a small inhaler device. After each dose you will be asked to perform a simple breathing test. If the breathing test shows that there has been no change in your results, then the dose will be increased and another simple breathing test will be performed.

This process will continue until either you reach the maximum dose or your breathing test shows a change in your results.

The prevention of infection is a major priority in all healthcare and everyone has a part to play.

- Please decontaminate your hands frequently for 20 seconds using soap and water or alcohol gel if available
- If you have symptoms of diarrhoea and/or vomiting, cough or other respiratory symptoms, a temperature or any loss of taste or smell please do not visit the hospital or any other care facility and seek advice from 111
- Keep the environment clean and tidy
- Let's work together to keep infections out of our hospitals and care homes.

Review Date 14.01.2025 Date Produced 2016 MI_1696414_13.04.22_V_2

Are there any risks involved in having the test?

Airway narrowing can be associated with breathlessness, chest tightness, cough or wheeze. If any of these occur it will be short-lived and any effect of the Mannitol will be quickly reversed using a Salbutamol (Ventolin) inhaler. The use of Salbutamol (bronchodilator/reliever) will ensure your airways open back up and return to normal before you leave the department.

Mannitol will not have any effect on the airways of people who do not have over-sensitive airways.



What happens after the test?

You will be able to go home and resume normal activities.

When will I get the results?

Please note that you will not be given the results on the day. The results will be sent to the referring consultant who will discuss them with you when you next attend clinic.

What preparations do I need to make before my test?

In preparation for the inhaled Mannitol challenge test please temporarily stop taking the medication, for the length of time shown in the table on page 3.

If you are unsure of how long to temporarily stop your medication, please contact the Respiratory Centre on Tel. 01902 695061.

Please contact the department if you have chest pain, recently had a heart attack (less than 6 weeks), coughing up blood, had recent surgery, have blood clots (embolism, DVT), a recent lung collapse or have recently had a stroke. Any of these conditions will unfortunately make it unsafe (contraindications) for you to perform the breathing test which is an important part of the test.

In addition, if you have had a cold or chest infection within two weeks of your appointment then please contact the department. If you are pregnant or currently breast feeding, we will not be able to perform the test.

Finally, please do not smoke for 6 hours before, avoid caffeine (tea, coffee, cola, chocolate) and vigorous exercise on the day of the test.

Time To Withold	Medication
6-8 Hours	Inhaled non-steroidal anti-inflammatory agents, for example, Sodium Cromoglycate (Intal)
	Nedocromil Sodium (Tilade)
8 Hours	Short acting Beta2 agonists, for example, Salbutamol (Ventolin, Salamol) Terbutaline (Bricanyl)
12 Hours	Short acting anticholinergic, for example, Ipratropium Bromide (Atrovent)
12 Hours	Inhaled corticosteroids, for example,. Beclometasone (Clenil, Qvar), Budesonide (Pulmicort), Fluticasone (Flixotide)
24 Hours	Inhaled corticosteroids plus long acting Beta2 agonists, for example, Seretide, Fostair, Symbicort
24 Hours	Long acting Beta2 agonists, for example, Serevent, Oxis
24 Hours	Theophylline, for example, Uniphyllin
72 Hours	Long acting anticholinergic, for example, Tiotropium Bromide (Spiriva)
72 Hours	Antihistamines, for example, Cetirizine (Zirtec), Chlorphenamine (Piriton), Fexofenadine, Loratadine
96 Hours	Leukotriene-receptor antagonists, for example, Montelukast (singular)

For further information about your test please contact:

The Respiratory Centre (B1)

New Cross Hospital Wolverhampton Road Wolverhampton WV10 0QP

01902 695061

Monday – Friday, 9:00am – 5:00pm

English

If you need information in another way like easy read or a different language please let us know.

If you need an interpreter or assistance please let us know.

Lithuanian

Jeigu norėtumėte, kad informacija jums būtų pateikta kitu būdu, pavyzdžiui, supaprastinta forma ar kita kalba, prašome mums apie tai pranešti.

Jeigu jums reikia vertėjo ar kitos pagalbos, prašome mums apie tai pranešti.

Polish

Jeżeli chcieliby Państwo otrzymać te informacje w innej postaci, na przykład w wersji łatwej do czytania lub w innym języku, prosimy powiedzieć nam o tym.

Prosimy poinformować nas również, jeżeli potrzebowaliby Państwo usługi tłumaczenia ustnego lub innej pomocy.

Punjabi

ਜੇ ਤੁਹਾਨੂੰ ਇਹ ਜਾਣਕਾਰੀ ਕਿਸੇ ਹੋਰ ਰੂਪ ਵਿਚ, ਜਿਵੇਂ ਪੜ੍ਹਨ ਵਿਚ ਆਸਾਨ ਰੂਪ ਜਾਂ ਕਿਸੇ ਦੂਜੀ ਭਾਸ਼ਾ ਵਿਚ, ਚਾਹੀਦੀ ਹੈ ਤਾਂ ਕਿਰਪਾ ਕਰਕੇ ਸਾਨੂੰ ਦੱਸੋ।

ਜੇ ਤੁਹਾਨੂੰ ਦੁਭਾਸ਼ੀਏ ਦੀ ਜਾਂ ਸਹਾਇਤਾ ਦੀ ਲੋੜ ਹੈ ਤਾਂ ਕਿਰਪਾ ਕਰਕੇ ਸਾਨੂੰ ਦੱਸੋ।

Romanian

Dacă aveți nevoie de informații în alt format, ca de exemplu caractere ușor de citit sau altă limbă, vă rugăm să ne informați.

Dacă aveți nevoie de un interpret sau de asistență, vă rugăm să ne informați.

Traditional Chinese

如果您需要以其他方式了解信息,如易读或其他语种,请告诉我们。 如果您需要口译人员或帮助,请告诉我们。