



**SPIROMETRY:
FOR EARLY DIAGNOSIS AND MANAGEMENT OF ASTHMA**

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Studies have shown that patients with asthma and their physicians often underestimate the severity of this disease. To make matters worse, many asthmatics can have little or no symptoms with routine daily activities for decades before disease progression actually catches up with them. This lag period between symptom development and often-irreversible lung disease is difficult to assess without measurable parameters. The chronic nature of asthma also necessitates the use of objective information to follow its progression. One of the simplest and more accurate assessment tools for both diagnosis and follow-up of asthma is the spirometry.

Spirometry can be quickly performed in your doctor's office without pain or difficulty. The study measures air flow into and out of the lungs during forced respiration. You will be asked to blow into the mouthpiece of the spirometer as hard as you can. You will take a deep breath, and then exhale vigorously and as rapidly as possible through the tubing while measurements are recorded. This exercise is repeated a few times to lessen the risk of variability between each trial. It is often followed with re-evaluation after giving a bronchodilator, which is a medication that opens the airways to determine whether obstruction to airflow can be relieved. The complete results are then recorded and analyzed by the computerized sensor, then tabulated, graphed and printed. Your doctor then interprets the results. The spirometry readings can be collected and compared serially to better monitor your progress over time. This is analogous to having your blood pressure monitored and recorded each time you visit your doctor's office.

Many asthmatics can have subtle abnormalities on their spirometry while they are still asymptomatic. This is very important since early diagnosis can improve long-term outcome and provide guidance with decisions on medications, dosage and management plans. The incidence of asthma has been steadily increasing over the last few decades. It is imperative to have tools for early diagnosis and ongoing follow-up. Spirometry provides a non-invasive test to diagnose asthma, its severity at the onset and guidance towards management.

So, the next time you are at your doctor's or asthma specialist's office, be prepared to blow hard into the mouthpiece of the spirometer and don't be shy to discuss the results with your physician and follow along with your progress.