Lung Volume Reduction Surgery (LVRS)

What is lung volume reduction surgery?
Lung volume reduction surgery (LVRS) is considered for people who have moderate to severe emphysema on chest CT scan. There are often portions of the lung tissue that are more diseased than other portions. LVRS removes up to 20 to 30 percent of the most diseased tissue from the lungs at one time. Removing some of the emphysema helps the healthier areas of the lungs and muscles to function better. People often are able to exercise more and feel less short of breath following lung volume reduction surgery.

Who may benefit from lung volume reduction surgery?
Lung volume reduction surgery is considered for adults with certain patterns of severe emphysema. Specific tests are done to determine if lung volume reduction surgery is recommended. These tests include breathing tests, a chest CT scan, arterial blood gas (ABG), lung perfusion study and exercise test.

People who benefit from the LVRS have severe emphysema with certain patterns of emphysema on chest CT scan, particularly those with more emphysema in the upper lobes. Other benefits of LVRS include improved quality of life and a longer life.

Testing can help your health care provider determine whether LVRS may be beneficial for you. Most people who are considering LVRS are referred to a pulmonary specialist. Not all medical centers can perform LVRS.

If LVRS is considered, in addition to the above a person must:
- Have quit smoking for at least 6 months and
- Participate in a pulmonary rehabilitation program before and after the surgery.
What can you expect?
Most people who have LVRS stay in the hospital for 7-10 days, although some people require a longer stay. Full recovery for physical activity may take 8-12 weeks. If LVRS is recommended, you will meet with the doctor who will perform the surgery. The doctor will review what to expect before, during and after the surgery. The doctor will also explain the risks and benefits of this surgery in more detail.

Questions to ask my health care team
If you have thought of questions to ask your health care provider after reading this Test Facts, write them down. Ask your health care provider at your next visit.

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