

da Vinci® Thymectomy



Changing the Experience of Cardiothoracic Surgery

Are you a candidate for the latest treatment option for myasthenia gravis?

Your doctor may be able to offer you a new, minimally invasive surgical procedure.

Your doctor is one of a growing number of surgeons worldwide providing leading-edge treatments such as *da Vinci®* Thymectomy.

da Vinci Thymectomy is setting a new standard for the surgical treatment of myasthenia gravis.

For more information on
da Vinci Thymectomy,
please visit:

www.IntuitiveSurgical.com

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Disclaimer

While clinical studies support the use of the *da Vinci* System as an effective tool for minimally invasive surgery, individual outcomes may vary. Ask your doctor about whether *da Vinci* Thymectomy may be an appropriate treatment for your medical condition.

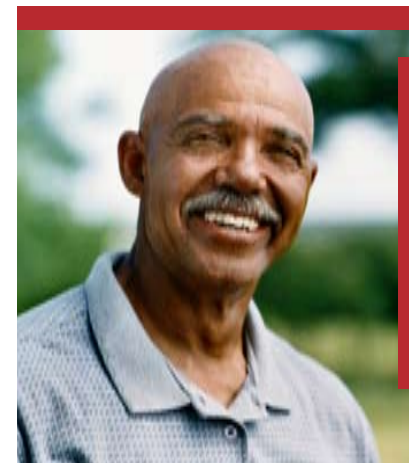
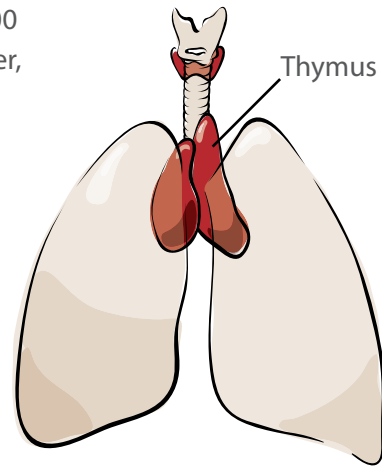
The Condition: Myasthenia Gravis

Myasthenia gravis (MG) is a chronic autoimmune neuromuscular disease characterized by varying degrees of skeletal muscle weakness. MG frequently affects muscles that control eyelid movement, facial expression and swallowing. It most commonly occurs in women under 40, men over 60 and affects all ethnic groups.

In the US, only about 14 in every 100,000 people are diagnosed with MG. However, MG is thought to be underdiagnosed because muscle weakness is a common symptom of so many disorders.

While scientists do not fully understand the exact cause of MG, they do know that the thymus gland - which is located in the upper chest and plays an important role in the development of the immune system - contributes to the disease.

With MG, antibodies block, alter or destroy the body's neurotransmitter receptors. The result is that muscle contractions cannot occur. Thus, MG is an autoimmune disease because the body's immune system - which is supposed to protect against foreign invaders - instead attacks itself.

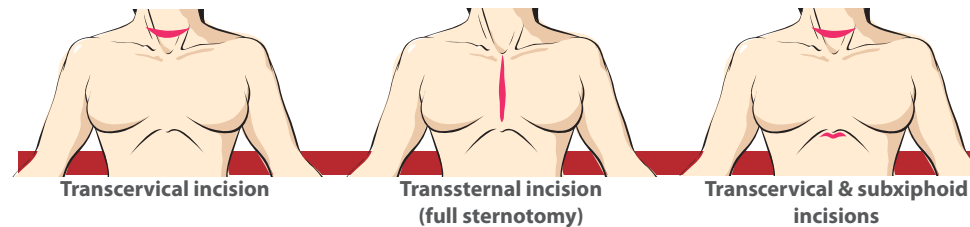


Clinical studies conclude that *da Vinci* Thymectomy offers the advantages of a minimally invasive approach while being as safe and effective as traditional open surgery.*

The Surgical Treatment: Thymectomy

For those suffering from MG, there are several types of treatment options available, of which one is surgery. Typically, this involves the removal of the thymus gland, a procedure called thymectomy.

There are two widely used approaches for thymectomy – the transcervical and the transsternal approaches. The transcervical approach requires an incision across the neck. The surgeon may also create a secondary incision below the xiphoid (the lowest point of the sternum). A transsternal approach may require up to a 10-inch incision through the sternum.

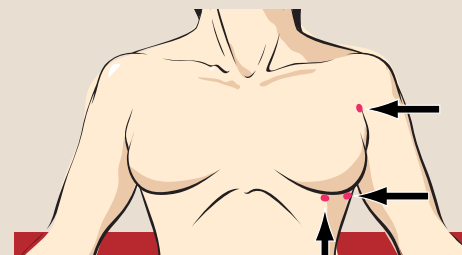


da Vinci Thymectomy: A Less Invasive Surgical Procedure

If your doctor recommends surgical repair, you may be a candidate for a new, less invasive surgical procedure called *da Vinci* Thymectomy. This procedure uses a state-of-the-art surgical system designed to help your surgeon see vital anatomical structures more clearly and to perform a more precise operation.

For most patients, *da Vinci* Thymectomy offers numerous potential benefits over traditional open-chest surgery, including:

- Shorter hospital stay
- Less pain and scarring
- Less risk of wound infection
- Less blood loss and fewer transfusions
- Faster recovery
- Quicker return to normal activities



da Vinci Thymectomy incisions

As with any surgery, these benefits cannot be guaranteed, as surgery is patient- and procedure-specific.



The Enabling Technology: *da Vinci* Surgical System

The *da Vinci* Surgical System is powered by state-of-the-art robotic technology. The System allows your surgeon's hand movements to be scaled, filtered and translated into precise movements of micro-instruments within the operative site.

The *da Vinci* System enhances surgical capabilities by enabling the performance of complex surgeries through tiny surgical openings. The System cannot be programmed, nor can it make decisions on its own. The *da Vinci* System requires that every surgical maneuver be performed with direct input from your surgeon.

The *da Vinci* Surgical System has been successfully used in tens of thousands of minimally invasive procedures worldwide.

*Ashton RC Jr, McGinnis KM, Connery CP, Swistel DG, Ewing DR, DeRose JJ Jr. Totally endoscopic robotic thymectomy for myasthenia gravis. *Ann Thorac Surg.* 2003 Feb;75(2):569-71.
Bodner J, Wykypiel H, Wetscher G, Schmid T. First experiences with the *da Vinci* operating robot in thoracic surgery. *Eur J Cardiothorac Surg.* 2004 May;25(5):844-51.
Rea F, Bortolotti L, Girardi R and Sartori F. Thoracoscopic thymectomy with the *da Vinci* surgical system in patient with myasthenia gravis. *Interactive Cardiovascular and Thoracic Surgery.* 2003 2:70-72. See PubMed, www.ncbi.nlm.nih.gov, for abstracts.