# Thyroid Cancer Diagnosis?

Learn why *da Vinci*® Surgery may be your best treatment option





# The Treatment: Thyroid Surgery

Your doctor will discuss treatment options with you in detail. Generally, treatments include: surgery, radioactive iodine treatment, thyroid hormone therapy, external beam radiation, or chemotherapy.<sup>3</sup> Treatment plans often use two or more of these options, but surgery is the main treatment for all thyroid cancers.<sup>3</sup>

If you have a cancerous or potentially cancerous lesion, your doctor will most likely perform a thyroidectomy - removal of the thyroid gland. The size and location of the nodule will determine whether a thyroidectomy or thyroid lobectomy - removal of only part of the thyroid - is the best option.

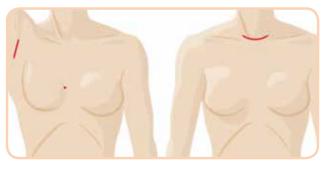
For cancers smaller than 1 cm ( $\frac{1}{2}$  inch) that show no signs of spreading, surgeons may remove only the affected side.<sup>3</sup> When cancer has spread outside the thyroid, surgery is also used to remove nearby lymph nodes.



While clinical studies support the effectiveness of the da Vinci™ System when used in minimally invasive su da Vinci Surgical System may not be appropriate for every individual. Always ask your doctor about all trea © 2010 Intuitive Surgical. All rights reserved. Intuitive, Intuitive Surgical, da Vinci, da Vinci S, da Vinci Si an marks of Intuitive Surgical. PN 870539 Rev. A 3/10 The two traditional surgical options for thyroid cancer are open and endoscopic surgery. Open surgery is considered effective but requires a 3.5 - 8 cm (1.4 - 3 inches) or larger incision in the neck, which can leave a visible scar.<sup>4,5</sup> Also, the view into deeper structures of the neck containing delicate nerves is limited.<sup>6</sup>

Endoscopic thyroidectomy is minimally invasive and may be effective for selected patients, but it can also leave visible scaring; multiple, smaller incisions are used, with the largest being 1.5 - 3 cm (.6 - 1.2 inches).<sup>4,5</sup>

One of the potential complications of thyroid surgery is voice change. Also, if most or all of your thyroid gland is removed, you will need to take daily thyroid hormone medication.<sup>7</sup>



da Vinci Thyroidectomy Incision

Open Surgery Incision

#### da Vinci Surgery for Thyroid Cancer:

## A Less Invasive Surgical Procedure

If your doctor recommends surgery to treat thyroid cancer, you may be a candidate for a safe, effective and minimally invasive procedure – da Vinci Surgery. Using the most advanced technology available, the da Vinci System enables your doctor to perform this delicate operation with breakthrough precision.

da Vinci provides your surgeon with superior vision, precision, dexterity and improved access. As a result, the visible scarring associated with traditional open surgery is avoided.

da Vinci Surgery offers thyroid cancer patients numerous potential benefits over traditional open surgery, including:

- > Superior cosmetic outcomes<sup>8,9</sup>
- No neck scars<sup>8,9</sup>
- > Avoids laryngeal nerve injury<sup>8</sup>

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 designed to provide surgeons with enhanced capabilities, including high-definition 3D vision and a magnified view. Your doctor controls the da Vinci System, which translates his or her hand movements into smaller, more precise movements of tiny instruments inside your body.



Though it is often called a "robot," da Vinci cannot act on its own. Instead, the surgery is performed entirely by your doctor. Together, da Vinci technology allows your doctor to perform complex procedures through just a few tiny openings. As a result, you may be able to get back to life faster without the usual recovery following major surgery.

The *da Vinci* System has been used successfully worldwide in hundreds of thousands of procedures to date.

World Health Organization. Global cancer rates could increase by 50% to 15 million by 2020. www.who.int. \*International Federation of Red Cross and Red Crescent Societies. Declining donor support may jeopardize Red Cross Red Crescent thyroid cancer detection programme. http://www.ifrc.org/docs/news/pro5/3405.asp. \*American Cancer Society. Thyroid Cancer. www.cancer.org. \*Ruggieri M, Straniero A, Mascaro A, et al. The minimally invasive open video-assisted approach in surgical thyroid diseases. BMC Surg. 2005 Published online 2005 April 27. doi: 10.1186/1471-2482-5-9. \*Brunaud L et al. Incision Length for Standard Thyroidectomy and Parathyroidectomy When Is It Minimally Invasive? Arch Surg. 2003;138:1140-1143. \*Robotic Thyroidectomy. A new option for thyroid surgery that doesn't leave a neck scar. www.EndocrineWeb.com./American Thyroid Association. Thyroid Surgery. www.thyroid.org \*Sang-Wook K et al. Robot-assisted endoscopic surgery for thyroid cancer: experience with the first 100 patients. Accepted: 12 January 2009 Springer Science+Business Media. \*Terris DJ, Amin SH; Robotic and endoscopic surgery in the neck; Operative Techniques in Otolaryngology (2008) 19, 36-41

## The Condition:

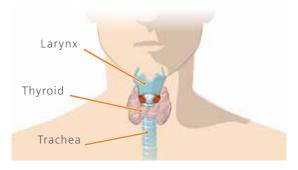
#### **Thyroid Cancer**

Your thyroid is a butterfly-shaped gland located at the base of your neck. Using the essential nutrient iodine, your thyroid produces hormones that regulate every aspect of your metabolism - from your heart rate to how quickly you burn calories.

Worldwide, thyroid cancer affects 123,000 people a year<sup>1</sup> and this number is expected to rise.<sup>2</sup> Women are affected by this disease more than men.<sup>3</sup> It is usually diagnosed between ages of 30 and 50.<sup>3</sup> Fortunately, when caught early, most thyroid cancer responds well to treatment.<sup>3</sup>

The exact cause of thyroid cancer is unknown, and there are few known risk factors.<sup>3</sup> However, the disease is more common where iodine consumption is very low and in adults with a history of head or neck radiation.<sup>3</sup>

Thyroid cancer is often diagnosed after lumps are found by the patient or during a routine exam.<sup>3</sup> Other symptoms may include: pain that extends to the ears, hoarseness, trouble swallowing, breathing problems and a persistent and unexplained cough.<sup>3</sup>



Your doctor is one of a growing number of surgeons offering da Vinci Surgery for Thyroid Cancer.

For more information about da Vinci Surgery and to find a surgeon near you, visit: www.daVinciSurgery.com

