

Making Sense of Your Diagnosis

Discovering you have a tumor or a functional disorder raises many questions and concerns. Learning as much as possible about your condition and available treatment options is critical in selecting the best course of therapy, as well as providing peace of mind for you and your family.

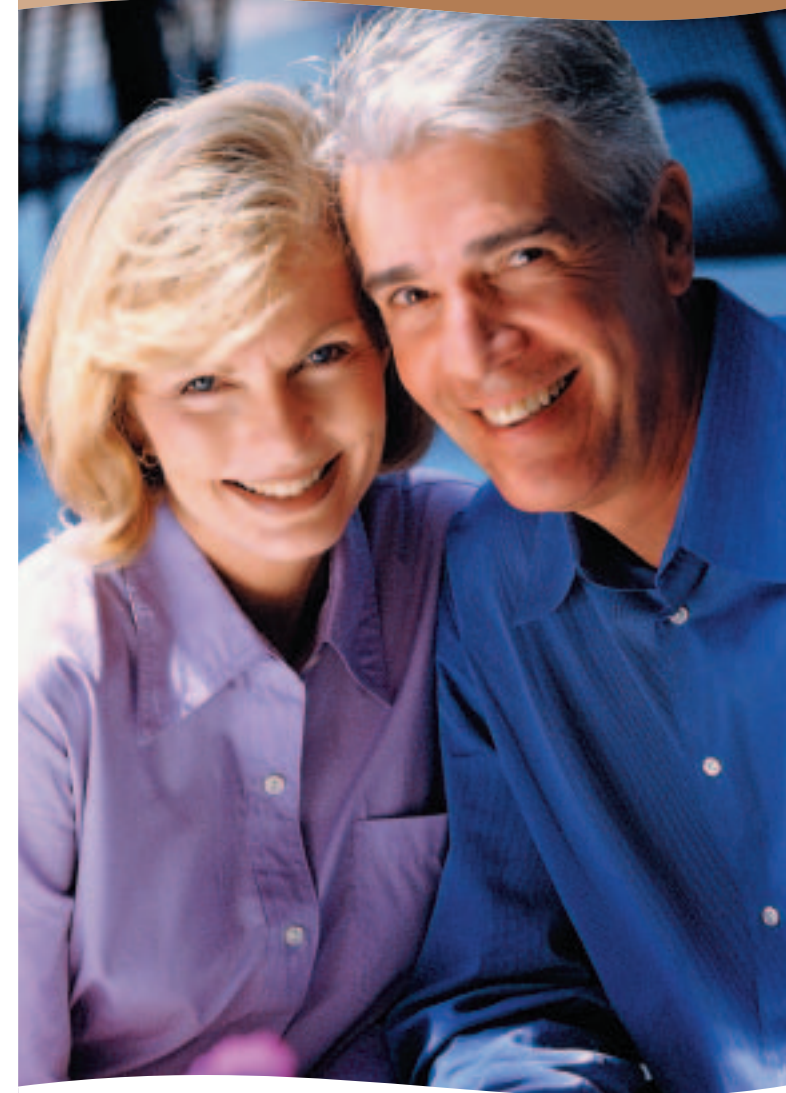
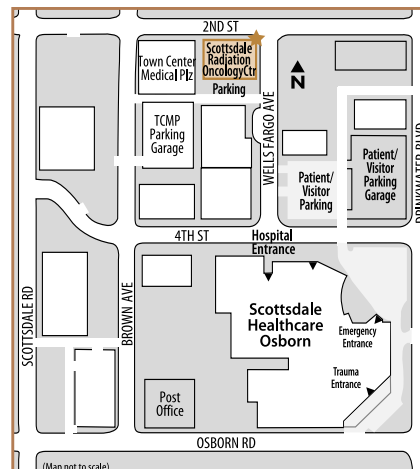
For the first time in Arizona, patients with a wide variety of benign and malignant tumors have access to a revolutionary new non-surgical treatment - Novalis® Shaped Beam Surgery™. Scottsdale Healthcare is the Valley's exclusive provider of the Novalis, which is offered as part of a multidisciplinary approach to cancer care through the auspices of the Virginia G. Piper Cancer Center. The Novalis Shaped Beam Surgery Center is housed in the Scottsdale Radiation Oncology Center, 7337 E. Second Street, on the Osborn campus.

Virginia G. Piper Cancer Center at Scottsdale Healthcare

Welcoming cancer patients from throughout the Southwest, the Virginia G. Piper Cancer Center at Scottsdale Healthcare combines leading edge cancer treatment and diagnostic services, innovative patient support programs and academic cancer research in a community hospital setting.

The art of healing and the science of biomedical research are united at the Virginia G. Piper Cancer Center, which is known for its personalized cancer care in a calming and soothing environment. As home of the Arizona Cancer Center, Greater Phoenix Area, the center is a hub of scientific activity for exploring new methods of cancer diagnosis and treatment.

For more information on Novalis Shaped Beam Surgery, contact:
 Cancer Care Coordinator 480-323-1255
 or email cancerinfo@shc.org
 Nicholas Flores, MD 480-882-6234



THE RIGHT PLACE, THE RIGHT PEOPLE

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What Is Shaped Beam Surgery?

Performed on an outpatient basis, Novalis Shaped Beam Surgery is a unique non-invasive treatment solution for patients otherwise considered untreatable by conventional means. Traditional invasive surgery can require intensive postoperative care and lengthy rehabilitation periods. A Novalis Shaped Beam Surgery procedure is painless, fast and requires no hospitalization. Patients typically return to their daily routine that same day.

The Novalis Shaped Beam Surgery System is the first device of its type to combine the benefits of stereotactic radiosurgery, 3-dimensional conformal radiotherapy and intensity modulated radiotherapy (IMRT) in a single platform. In this manner, the Novalis Shaped Beam Surgery System continuously shapes the treatment beam to precisely match the size and shape of the target. The tumor or lesion receives the maximum amount of radiation possible while healthy tissue only millimeters away remains protected and safe.

Although highly accurate and effective, Gamma Knife radiosurgery is limited to the treatment of relatively small lesions within the brain. Through the use of a unique high resolution beam-shaping device, the Novalis can precisely target lesions of virtually any size or shape in both the brain and body.

Suitable for Many Disorders

The Novalis Shaped Beam Surgery System can be used for the treatment of a wide variety of conditions such as:

Arteriovenous Malformations, Brain Metastases and Gliomas, Acoustic Neuromas, Meningiomas, Trigeminal Neuralgia, Cancers of the Head and Neck, Spine Tumors, Lung Cancer, Prostate Cancer and almost any localized tumor or lesion in the brain or body.

Is Novalis Shaped Beam Surgery the Same for Every Patient?

Novalis Shaped Beam Surgery can be performed in a single session with a high dose of radiation, also known as stereotactic radiosurgery; or in a series of smaller doses applied over several days, known as fractionated stereotactic radiotherapy. Fractionated stereotactic radiotherapy allows healthy tissue to recover from the effects of radiation before the next treatment session. A third method of beam shaping, intensity modulated radiotherapy (IMRT) offers the ultimate in customized treatment delivery. Your doctors will recommend the technique best suited for you after careful consideration of the size, shape and type of your tumor.

What to Expect During Novalis Treatment

Step 1: Fitting the Head Frame, Mask or Custom Body Support System



On the morning of your treatment, your doctors will select the immobilization device best suited for your therapy. For treatments involving the brain, a circular ring may be fitted to your head. During the fitting, local anesthesia will be administered to reduce discomfort. The head ring is designed to keep your head motionless during treatment and place reference markers in a fixed position in relation to your head. Your doctor may decide to use a customized plastic face mask rather than a head frame. Constructing the face mask is completely painless and typically requires no anesthesia. For lesions outside the brain, a custom body support system may be used instead.

Step 2: Diagnostic Imaging



After the immobilization device is secured, you will undergo a series of diagnostic scans in order to precisely define the size and shape of the lesion and its relationship to other structures within your body.

Step 3: Image transfer and planning



Your team of doctors will gather the information from the scans and enter it into the Novalis computer program. This is where the exact position, dose and

configuration of the radiation beams will be calculated. You will be free to move about, read a book or sit with friends and family while your treatment is being planned. Once the customized treatment plan has been completed, you will be positioned comfortably on a specially designed treatment table. A series of carefully controlled quality checks will be performed to assure that the radiation beams will be aimed precisely at the chosen target position.

Step 4: Treatment



Once planning has been completed, you will be taken to the treatment room and positioned on the Novalis Shaped Beam Surgery treatment table. Your head

frame, mask or custom body support system will be secured to the table to minimize any motion during the procedure. Once the actual treatment begins, the Novalis system will begin moving around your head or body, delivering the specified dose of radiation with millimeter accuracy. The radiation is painless and you will be able to talk to your doctors throughout the entire procedure.