



Katharina Esser

Waldfeucht-Haaren,
Germany

Age: 12

Profession: Student

Hobbies: Horseback riding, painting, playing piano, bicycling

Diagnosis: Intraorbital eye cancer

Treatment: Chemotherapy followed by brachytherapy

Profile: Fun-loving, active, studious

Quote: "Laughter can help you get through the dark days."



BRACHYTHERAPY: FIGHTING CANCER FROM THE INSIDE

Tiny radiation implants placed in or near tumors are delivering promising results for some patients who might otherwise not be treatable.

Katharina Esser is a smart, active 12-year-old who likes to paint and dreams of becoming a veterinarian. Watching her gallop across a field on her favorite horse, it's hard to believe that at the tender age of three, Katharina almost lost her vision and could have lost her life. Doctors discovered a cancerous tumor above her left eye and treated it with chemotherapy. But not long afterward, Katharina started seeing double. The tumor had returned and threatened to turn her cheery world into darkness.

Katharina was sent to the University Hospital Schleswig-Holstein in Kiel, Germany, renowned for its groundbreaking work in intra-orbital brachytherapy implants. Often combined with external-beam radiotherapy, brachytherapy treats cancer by placing tiny radiation sources precisely in or near a tumor—in this case, near Katharina's left eye.

With traditional treatment, Katharina's eye would have been surgically removed, explains György Kovács, MD, head of the university hospital's Interdisciplinary Brachytherapy Center. However, Varian's advanced brachytherapy tools helped Dr. Kovács save Katharina's eyesight as well as her life.

Dr. Kovács and his team also combine brachytherapy with organ-preservation surgery and external-beam treatments for intraorbital tumors in adults suffering from advanced nasal sinus cancers. Doctors report the result has been a high cure rate with preserved visual acuity.

Brachytherapy has also been used to successfully treat prostate cancer patients at several cancer centers around the world, including Mount Vernon Hospital in Northwood, England. In a pioneering research program, Dr. Peter Hoskin and his team use Varian brachytherapy tools to deliver the full high-dose-rate brachytherapy treatment in just four sessions over three days. "This is a very important factor for many patients," says Dr. Hoskin. "Because they need to take only a couple of days off work, they are very enthusiastic to receive these escalated treatments."

Innovations in brachytherapy are enabling patients to improve their quality of life. "There is not even a mark on Katharina's face from the treatment," says Kathy Esser, Katharina's mother. "She became ill so young, and we've all been through a lot together. Every time I see her laughing now, I laugh too." **V**