

Vienna, 29 June 2022

Interventional radiology: beating breast cancer with cold therapy

Each year, 5,500 Austrian women develop breast cancer and 1,500 die of the disease in our country each year. New, highly promising, minimally invasive treatment methods are now available at a handful of specialist clinics. In the case of mammary carcinoma, cryotherapy (treatment with cold) represents a viable therapeutic option for smaller, local breast tumours. 3D mammography now puts a new diagnostic tool at radiologists' disposal to help pinpoint this type of carcinoma at an early stage. These breakthroughs and numerous other radiological developments will be in the spotlight at the European Congress of Radiology at the Austria Center Vienna, which will bring 25,000 participants to the venue between 13 and 17 July.

"Breast cancer remains the most common form of cancer in women, and is the second most common cause of carcinoma deaths in western industrial nations. Each year, in Austria alone around 5,500 women develop breast cancer, with the disease also claiming 1,500 lives annually. But it does not have to be this way, as early radiological screening can reduce mortality by 20-25%," explained Prof. Michael Fuchsjäger, Chairman of the Department of Radiology at the Medical University of Graz, and Deputy Chairman of the European Congress of Radiology.

Beating breast cancer with cold therapy thanks to interventional radiology

Radiology is a key factor in breast cancer screening and diagnostics. Over the past 15 years, interventional radiology has made huge strides and is now used to successfully treat certain types of the disease. "Small, local tumours up to 2-3cm in size can be treated using a minimally invasive cryotherapy procedure," Fuchsjäger confirmed. With the patient under local anaesthetic, a small 1.5mm-wide needle is inserted into the tumour, which is then deep frozen to -186°C using argon gas or liquid nitrogen. Following treatment with these "ice balls", the tumour tissue dies off. "Although the dead tumour cells stay in the body, they can be precisely removed in a short, one-off, invasive surgical intervention which puts much less of a burden on the patient than open surgery," Fuchsjäger said, outlining the advantages.

Mamma diagnostics screening even more important after the pandemic

Early diagnosis is still one of the prerequisites for successful treatment of breast cancer. The earlier the disease is identified, the greater the chances of recovery. Because women aged between 45 and 69 are the highest risk group, in 2014 Austria introduced a special



nationwide breast cancer screening programme under which this age group is automatically invited to have a mammogram every two years. "Each year, a minimum of 700,000 mammograms should be performed to screen for breast cancer. Many of the screening appointments that ended up being postponed as a result of the first two lockdowns were rescheduled for the last autumn and this spring," the renowned radiologist confirmed. "But as the number of screenings performed still declined in spite of this, it is even more important to encourage women to attend their appointments so as to avoid an increase in case numbers over the next few years," Fuchsjäger continued.

3D mammograms in the ascendancy

Besides conventional 2D mammograms – a specialist x-ray procedure in which images of the breast are captured from two sides – there are now specialist centres and institutes that offer 3D mammograms (breast tomosynthesis). "With this method, the images of the breast are captured from different angles using low-dose x-ray. The result is up to 30 individual layered images which allow even very subtle changes to be pinpointed," Fuchsjäger noted, highlighting the strengths of the new diagnostic tool. Further tests to clarify diagnosis or subsequent tissue sampling (biopsy) can be conducted using ultrasound, stereotactic mammography or magnetic resonance imaging (MRI) if necessary.

Preparing patients physically and mentally for initial diagnosis

To elevate the quality of communication between radiologists and patients to a new level while also highlighting individual needs, the European Congress of Radiology has its own patient focus that covers various topics. These include the launch of the "Be accepted" awareness campaign. Designed as a guide for patients that shows them what to expect following their initial diagnosis, it outlines the next steps, while revealing what they can do to keep themselves in the best possible condition mentally and physically. The free lectures will take place from 14-16 July at the neighbouring Tech Gate tower and are open to the public. Click here to find out more about the event talks: https://connect.myesr.org/patients-in-focus/

Multidisciplinary approach the key to success

This year's congress has chosen Building Bridges as its motto, highlighting the fundamental importance of patient wellbeing. The inclusion of related medical disciplines, transfer of knowledge between them and learning from one another unlocks synergies that benefit patients. "The key to it all is promoting a multidisciplinary approach in health care and in the close cooperation between radiologists and clinical partners. I hope that this congress will usher in a new era in radiology. A future in which we work closely with our clinical and diagnostic partners, with radiologists, with researchers and industry partners, with policymakers, and with our patients, too," said Professor Regina Beets-Tan, Congress



President and Chair of the Department of Radiology at the Netherlands Cancer Institute in Amsterdam, outlining her vision for the future.

About IAKW-AG and the ECR

Internationales Amtssitz- und Konferenzzentrum Wien, Aktiengesellschaft (IAKW-AG) is responsible for maintaining the Vienna International Centre (VIC) and operating the Austria Center Vienna (ACV). The Austria Center Vienna is Austria's largest conference centre, with 19 halls, 180 meeting rooms, and some 26,000m² of exhibition space, and is one of the top players on the international conference circuit. Since 1991, the venue has hosted the annual European Congress of Radiology (ECR), which today attracts more than 25,000 participants. The event is Europe's largest and the world's second largest radiology sector get-together.

Contact

IAKW-AG – Austria Center Vienna Claudia Reis Deputy Press Officer

Tel: + 43-676-3199523 Mail: claudia.reis@acv.at