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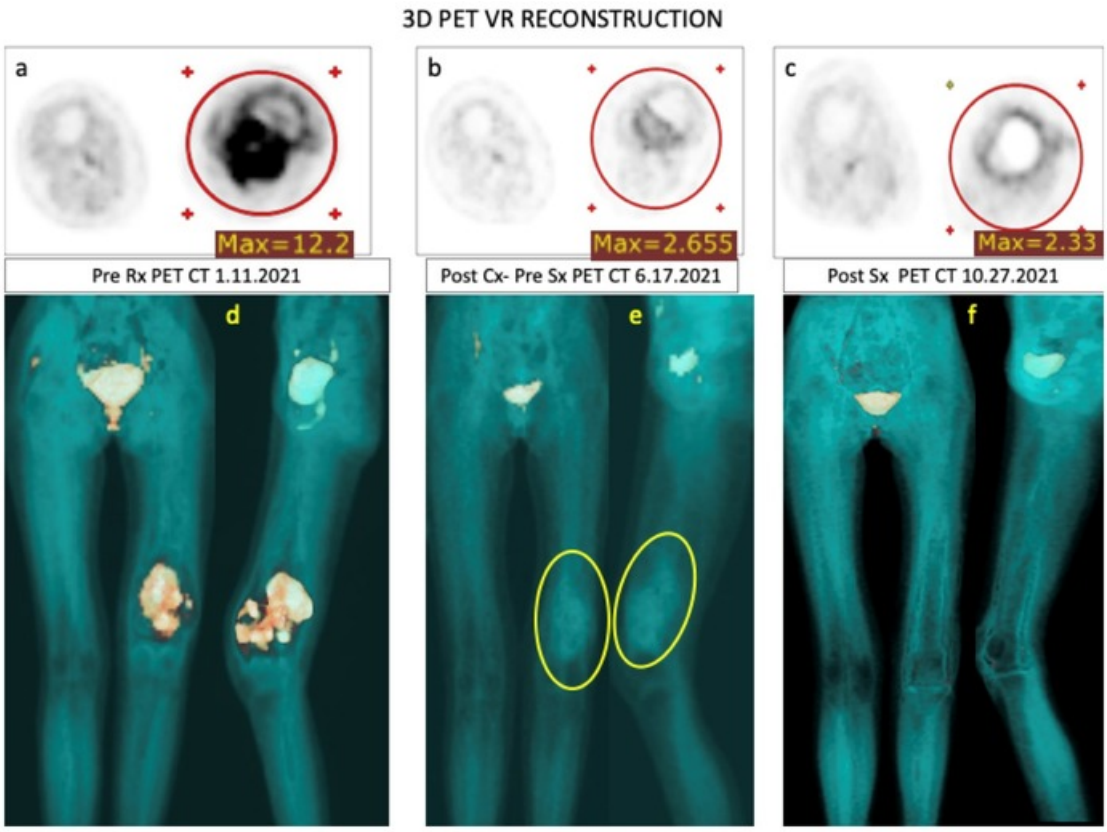
The world's first Extended Isolated Stopflow Limb Infusion (EISLI) to treat osteosarcoma results in complete remission



Burghausen/Germany (ots) -

A young woman faced the choice of fighting her cancer conventionally and losing her leg in the process or attempting to save her leg with a novel stop-flow infusion therapy. Not only did this new treatment save her leg, but she is still tumor-free 18 months later. Osteosarcomas are rare, generally highly malignant, tumors that predominantly affect young people and develop in long, tubular shaft bones like the thigh. Because they typically grow quickly and metastasize early, attempts are generally made to shrink the tumor, with early combination chemotherapy followed by surgical excision, to save the affected limb where possible. However, if the tumor cannot be completely resected due to its location and spread, amputation is often unavoidable.

18-year-old patient diagnosed with highly aggressive osteosarcoma

To avert this outcome, an Extended Isolated Stopflow Limb Infusion (EISLI) was implemented for the first time to treat osteosarcoma at the Medias Hospital in Burghausen, which specializes in the application and further advancement of innovative therapies. The patient, in this case, is a young woman with a large tumor in her thigh, diagnosed as a highly aggressive osteosarcoma. Although the standard therapy of high-dose cytostatics had the desired effect on the tumor, it was discontinued early because of side effects that were not tolerated by the patient. Alternative treatment attempts proved ineffective, with clear progression of the disease including suspicious metastases in the groin and thigh region diagnosed after a few months. An external orthopedic department, therefore, recommended amputating the leg as a life-saving treatment option. But the patient decided against the amputation procedure, instead opting for a highly concentrated regional chemotherapy administered by Extended Isolated Stopflow Limb Infusion (EISLI).

To date, the first-ever innovative use of EISLI to treat osteosarcoma

The EISLI method developed at the Medias Hospital is a variant of limb perfusion adapted to the treatment of osteosarcoma. The principle of this therapy is to restrict chemotherapeutic treatment to the local area around the tumor by using a stop-flow infusion to isolate the tumor's blood supply from the patient's general circulation.

In the case presented here, this was achieved by positioning balloon catheters at arterial and venous branch points in the pelvis and appropriately directing the perfusion in this cancer-affected region. This method allows the delivery of very high chemotherapy agent concentrations directly to the tumor site, which exceed the tumor concentrations normally achieved by conventional systemic chemotherapy many fold, whilst retaining a low total chemotherapy agent dose. Patients typically experience very few, if any, side effects with this procedure.

The tumor in the patients thigh was successfully shrunk after four EISLI treatment cycles, without any subjective side effects, and was subsequently completely resected by surgery (see Fig. 1). A knee joint endoprosthesis was then implanted and a final EISLI cycle administered. A PETCT scan two months later found no evidence of local recurrence or distant metastases, and afollow-up examination at 18 months also failed to detect any traces of cancer.

Fig. 1: Timeline of tumor reduction during the different EISLI cycles

The Medias Hospital is an active center of Research & Development.

The Medias Hospital in Burghausen specializes in the application and further advancement of innovative cancer therapy procedures and is held in high esteem both nationally and internationally in this field. As part of these efforts, clinical studies are regularly conducted at the Medias Hospital to optimize patient survival as well as quality of life. Many of the results from this research have already been published in internationally acclaimed journals or presented at key industry events.

Therapy options also in America: partner clinic in the Dominican Republic

The Medias Hospital continues to forge international relationships and partnerships. Our experts work closely with our partner clinic the Centro Médico Punta Cana in Punta Cana in the Dominican Republic, for instance. Due to the shorter travel distance, patients from North and South America in particular can therefore benefit from the expertise and experience of innovative cancer therapies from the Medias Hospital.

About the Medias Hospital in Burghausen

The Medias Hospital is a private medical center that specializes in Oncology Surgery and Regional Chemotherapy (RCT) under the direction of Prof. Dr. med. Karl Reinhard Aigner, who has 40 years of expertise in the field and is considered a pioneer of RCT worldwide. Its range of therapies extends to immunotherapy, hyperthermia, and pain therapy. The hospital comprises a total of 36 inpatient beds

and a surgery unit with two operating theatres. The Medias Hospital is an active center for research and science, teaching, and the international training of oncology surgeons. Among others, national collaborations have notably been set up with the Genomic Medicine Network (Netzwerk Genomische Medizin, NGM), in the lung cancer field with the Lung Cancer Group Cologne (LCGC) as well as with the Institute of Pathology in the Center for Integrated Oncology (CIO) at the University Hospital of Cologne and the University Hospital of Giessen.

You can find more information about the Medias Hospital here: https://www.medias-klinikum.de/home/pressemitteilungen

If you have any questions, require pictures, or would like to interview one of our experts, please do not hesitate to contact us:

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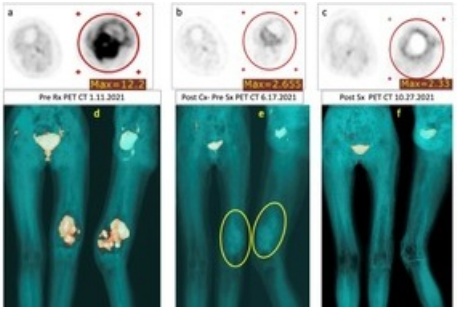

Fig. 1: Timeline of tumor reduction during the different EISLI cycles / More information via ots and www.presseportal.de/en/nr/143407 / The use of this image for editorial purposes is permitted and free of charge provided that all conditions of use are complied with. Publication must include image credits.