RE-FOCUSING VISION AN OVERVIEW OF THE SGRT COMMUNITY UAE MEETING

The very first SGRT Community meeting in the United Arab Emirates convened on March 11, featuring clinical experts sharing knowledge and best practice about Surface Guided Radiation Therapy. In addition to the usual wealth of peer-to-peer learning, the meeting highlighted new innovations within SGRT. Clinicians covered the importance of SGRT for improving accuracy and efficiency across different treatment sites, going tattoo and mark-free, and future SGRT innovations.

URFACE GU

AN OVERVIEW:

EFFICIENCY AND ACCURACY



Amine Khemissi from NCCCR, Hamad Medical Corporation shared the department's experience with AlignRT® InBore[™] on their Ethos linear accelerator. After commissioning using ESTRO-ACROP newest guidelines for SGRT, the department installed AlignRT® InBore[™] in hopes of carrying out intra-fraction monitoring and for use with DIBH treatments. A clinical case carried out by the team found pitch misalignment was reduced by 10 degrees for rectal patients, and the average magnitude of CBCT shifts decreased with AlignRT® InBore[™]. Treatment time also decreased by 22%. "We were able to detect 5mm intra-fraction shift caused by the cough during Ethos adaptive treatment, after repeating CBCT and correcting with shifts, we found out that AlignRT® and CBCT shifts **Dr. Wassim Jalbout** from AUBMC, Lebanon reported that implementing AlignRT[®] for breast treatments reduced radiation dose and generally increased accuracy. Similarly, the team found that DIBH with AlignRT[®] decreased the radiation dose to the heart from 1.71 to 0.72, resulting in less irradiation to critical organs.

Similar accuracy results were presented by **Dr. Ashish Rustogi** from King Hamad University Hospital, Bahrain. Dr. Rustogi found that DIBH treatments with AlignRT[®] decreased the mean heart dose by 60% ,and dose on LADs were decreased "even further".

"Intra-fraction motion monitoring is the biggest advantage

to SGRT for us," said **Dr. Alina Mihai** from the Beacon Hospital, Ireland. Presenting findings on SGRT for 'every patient, every fraction', Dr. Mihai found that AlignRT[®] detected patient motion during IGRT, which would have underdosed the patient if missed. With AlignRT[®] the magnitude of shifts also decreased significantly for DIBH breast treatments.

IMPLEMENTING SGRT FOR ROUTINE USE FOR SABR AND NON SABR TREATMENTS



Iqbal Abdullah Mohammed and Dr. Zahid Al Mandhari from SQCCC, Oman shared findings on their research on shifts from CBCT with tattoos to tattooless treatments with SGRT. The research demonstrated the accuracy of SGRT for breast treatments and the team concluded "we can save up to 10 minutes in breast treatments with AlignRT[®] compared to tattoo-based treatments". They reported high patient satisfaction and compliance with this new tattoo-free treatment. The department now intends to become a tattoo and mark-free site. Mark Wanklyn, from GenesisCare Australia, presented on "Implementing SGRT for routine use for SABR and non SABR treatments" and said " tattooless DIBH treatments are now the standard of treatment for us. Patients come through our clinic's door just for this." He also shared results on his clinic's study looking for correlation between IGRT and SGRT shifts. They found promising results with no significant difference between imaging and SGRT shifts for non-coplanar scenarios. Across multiple treatment sites the correlation between internal anatomy and SGRT was high, and further research will investigate if these results support the reduction of imaging.

Thank you to all our speakers for helping create an unforgettable peer-to-peer event.

The next SGRT Community meeting will be held on May 11th and 12th in New York (and online). Click here to find out more.