REX 1 - YEAR 2023

Incident description

A patient is to be treated with external radiation therapy (DIBH) on the left thoracic wall (with expander) and glandular regions. The treatment scheme prescribed is 15 * 2,670 Gy = 40,05 Gy.

Due to the contouring of the wrong breast by the attending radiation oncologist, an incorrect treatment plan was created and the patient was irradiated for 2 of the planned 15 fractions on the right breast instead of the left.

On the day of the third fraction, the incident was discovered by the RTT whilst checking the scar of the surgery. It was noticed then that the scar was on the left side while according to the treatment plan, the right side should be treated. The patient was removed from the table without administering fraction 3.

The attending physician was informed and the treatment plan was adjusted. The patient was informed of the incident and started the day after with a correct irradiation plan on the left side.

Root cause analysis

The following root causes have been identified:

Human factor: External
The attending radiation oncologist contours the right breast instead of the left thoracic wall and glandular regions.

Human factor: Intervention
Based on the erroneous contouring, an incorrect treatment plan was created.

Human factor: Monitoring
No scar monitoring was performed during the first two fractions of the patient's radiation treatment.

Corrective actions:

1. To date, there is no double-checking of the contouring performed in the radiation therapy department. This has already been discussed internally and the extent to which this is feasible/workable is being explored.

2. A time out procedure has been worked out: in addition to the existing procedure already applied as part of patient identification before each treatment, the RTT must ask the patient some extra data (the injury for which he or she will be treated, the laterality, …). There will also be a check of the injury (scar control).