Treatment of Head & Neck Tumors
INTRABEAM 600 from ZEISS
Precise and feasible technique for delivering IORT in head & neck tumors

Irrespective of the primary tumor location, the vast majority of recurrences occur at or adjacent to the original tumor site. Due to radiation scattering effects of conventional radiotherapy treatments for head and neck tumors, the risk of damaging various anatomically sensitive structures such as nerves, aorta, muscles or vocal cords is relatively high. Intraoperative radiation therapy (IORT) enables the delivery of radiation immediately after surgical resection and therefore directly into the tumor bed, minimizing scattering effects.

- Due to the high precision of IORT the radiation treatment is even possible after prior delivery of full courses of conventional external beam radiotherapy (EBRT).
- IORT leads to radiobiological benefits, which can result in enhanced tumor control compared to other techniques.
- The common radiation-induced side effects are being minimized with IORT for head and neck tumors.
- IORT is an additional option for the treatment of head and neck tumors, especially in the palliative setting.
IORT from ZEISS appears to be a safe technique for delivering IORT in patients with local, primary tumors, and recurrent head and neck tumors. Preliminary reports have demonstrated the feasibility of IORT from ZEISS for patients with head and neck tumors.\textsuperscript{4,5,6}

The clinical rationale
In general, for IORT no differences in postoperative complications compared to EBRT have been found.\textsuperscript{5} This is a result of different factors: first, due to the precise and targeted delivery of radiation directly and only to the target volume, and second, with IORT from ZEISS the normal tissue and sensitive structures in the head and neck area can be spared. Also, IORT from ZEISS is a safe technique\textsuperscript{4}; as a versatile application together with EBRT\textsuperscript{1}, it can also be applied as a single radiation treatment to save time for selected patients in recurrent situations.\textsuperscript{4}

Adapt the radiation to the needs of your patients
To irradiate the tumor bed, e.g. in the treatment of surgically exposed surfaces in the head and neck region, ZEISS offers a complete range of applicators in different shapes, sizes and diameters. This versatility enables the physician to exactly adapt the emitted radiation beam to the form and size of the tumor bed.
Literature References


