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## **Oral and Maxillofacial Surgery with Computer-assisted Navigation System**

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**Abstract:** Intraoperative computer-assisted navigation has gained acceptance in maxillofacial surgery with applications in an increasing number of indications. We adapted a commercially available wireless passive marker system which allows calibration and tracking of virtually every instrument in maxillofacial surgery. Virtual computer-generated anatomical structures are displayed intraoperatively in a semi-immersive head-up display. Continuous observation of the operating field facilitated by computer assistance enables surgical navigation in accordance with the physician's preoperative plans. This case report documents the potential for augmented visualization concepts in surgical resection of tumors in the oral and maxillofacial region. We report a case of T3N2bM0 carcinoma of the maxillary gingival which was surgically resected with the assistance of the Stryker Navigation Cart System. This system was found to be useful in assisting preoperative planning and intraoperative monitoring.

**Key words:** [Computer-assisted navigation system](#), [Oral and maxillofacial surgery](#), [Squamous cell carcinoma](#), [Noninvasive](#)

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