

CRANIOMAXILLOFACIAL SURGERY

Rana, M.; Holtmann, H.; Kanatas, A. N.; Singh, D. D.; Sproll, C. K.; Kübler, N. R. et al. (2019):

Primary orbital reconstruction with selective laser melted core patient-specific implants: overview of 100 patients.

In *The British journal of oral & maxillofacial surgery* 57 (8), pp. 782–787

DOI: <https://doi.org/10.1016/j.bjoms.2019.07.012> | PubMed: <https://www.ncbi.nlm.nih.gov/pubmed/31358375>

Wagner, Maximilian Eberhard Hermann; Lichtenstein, Jürgen Thomas; Winkelmann, Marcel; Shin, Hoen-Oh; Gellrich, Nils-Claudius; Essig, Harald (2015):

Development and first clinical application of automated virtual reconstruction of unilateral midface defects.

In *Journal of cranio-maxillo-facial surgery : official publication of the European Association for Cranio-Maxillo-Facial Surgery* 43 (8), pp. 1340–1347

DOI: <https://doi.org/10.1016/j.jcms.2015.06.033> | PubMed: <https://www.ncbi.nlm.nih.gov/pubmed/26211725>

Jansen, Jesper; Schreurs, Ruud; Dubois, Leander; Maal, Thomas J. J.; Gooris, Peter J. J.; Becking, Alfred G. (2016):

Orbital volume analysis: validation of a semi-automatic software segmentation method.

In *International journal of computer assisted radiology and surgery* 11 (1), pp. 11–18

DOI: <https://doi.org/10.1007/s11548-015-1254-6> | PubMed: <https://www.ncbi.nlm.nih.gov/pubmed/26179220>

Metzger, M. C.; Bittermann, G.; Dannenberg, L.; Schmelzeisen, R.; Gellrich, N-C; Hohlweg-Majert, B.; Scheifele, C. (2013):

Design and development of a virtual anatomic atlas of the human skull for automatic segmentation in computer-assisted surgery, preoperative planning, and navigation.

In *International journal of computer assisted radiology and surgery* 8 (5), pp. 691–702

DOI: <https://doi.org/10.1007/s11548-013-0818-6> | PubMed: <https://www.ncbi.nlm.nih.gov/pubmed/23417709>

Gander, Thomas; Blumer, Michael; Rostetter, Claudio; Wagner, Maximilian; Zweifel, Daniel; Schumann, Paul et al. (2018):

Intraoperative 3-dimensional cone beam computed tomographic imaging during reconstruction of the zygoma and orbit.

In *Oral surgery, oral medicine, oral pathology and oral radiology* 126 (2), pp. 192–197

DOI: <https://doi.org/10.1016/j.oooo.2018.04.008> | PubMed: <https://www.ncbi.nlm.nih.gov/pubmed/29886068>

CRANIOMAXILLOFACIAL SURGERY

Gander, Thomas; Essig, Harald; Metzler, Philipp; Lindhorst, Daniel; Dubois, Leander; Rücker, Martin; Schumann, Paul (2015):

Patient specific implants (PSI) in reconstruction of orbital floor and wall fractures.

In *Journal of cranio-maxillo-facial surgery : official publication of the European Association for Cranio-Maxillo-Facial Surgery* 43 (1), pp. 126–130

DOI: <https://doi.org/10.1016/j.jcms.2014.10.024> PubMed: <https://www.ncbi.nlm.nih.gov/pubmed/25465486>

Novelli, Giorgio; Tonellini, Gabriele; Mazzoleni, Fabio; Bozzetti, Alberto; Sozzi, Davide (2014):

Virtual surgery simulation in orbital wall reconstruction: integration of surgical navigation and stereolithographic models.

In *Journal of cranio-maxillo-facial surgery : official publication of the European Association for Cranio-Maxillo-Facial Surgery* 42 (8), pp. 2025–2034

DOI: <https://doi.org/10.1016/j.jcms.2014.09.009> | PubMed: <https://www.ncbi.nlm.nih.gov/pubmed/25458348>

REFERENCE PAPERS /

SEGMENTATION

EAR NOSE THROAT SURGERY

Pálházi, Péter; Nemes, Bálint; Swennen, Gwen; Nagy, Krisztián (2014):

Three-dimensional simulation of the nasoalveolar cleft defect.

In *The Cleft palate-craniofacial journal : official publication of the American Cleft Palate-Craniofacial Association* 51 (5), pp. 593–596

DOI: <https://doi.org/10.1597/13-041> | PubMed: <https://www.ncbi.nlm.nih.gov/pubmed/23902269>

FUNCTIONAL AND STEREOTACTIC NEUROSURGERY

Dayal, Viswas; Roquemaurel, Alexis de; Grover, Timothy; Ferreira, Francisca; Salazar, Maricel; Milabo, Catherine et al. (2020):

Novel Programming Features Help Alleviate Subthalamic Nucleus Stimulation-Induced Side Effects.

In *Movement disorders* : official journal of the Movement Disorder Society

DOI: <https://doi.org/10.1002/mds.28252> | PubMed: <https://www.ncbi.nlm.nih.gov/pubmed/32979290>

Reinacher, Peter C.; Várkuti, Bálint; Krüger, Marie T.; Piroth, Tobias; Egger, Karl; Roelz, Roland; Coenen, Volker A. (2019):

Automatic Segmentation of the Subthalamic Nucleus: A Viable Option to Support Planning and Visualization of Patient-Specific Targeting in Deep Brain Stimulation.

In *Operative neurosurgery (Hagerstown, Md.)* 17 (5), pp. 497–502

DOI: <https://doi.org/10.1093/ons/opz015> | PubMed: <https://www.ncbi.nlm.nih.gov/pubmed/30860266>

Polanski, Witold H.; Zolal, Amir; Sitoci-Ficici, Kerim Hakan; Hiepe, Patrick; Schackert, Gabriele; Sobottka, Stephan B. (2020):

Comparison of Automatic Segmentation Algorithms for the Subthalamic Nucleus.

In *Stereotactic and functional neurosurgery*, pp. 1–7

DOI: <https://doi.org/10.1159/000507028> | PubMed: <https://www.ncbi.nlm.nih.gov/pubmed/32369819>

Krüger, Marie T.; Kurtev-Rittstieg, Rebecca; Kägi, Georg; Naseri, Yashar; Hägele-Link, Stefan; Brugger, Florian (2020):

Evaluation of Automatic Segmentation of Thalamic Nuclei through Clinical Effects Using Directional Deep Brain Stimulation Leads: A Technical Note.

In *Brain sciences* 10 (9)

DOI: <https://doi.org/10.3390/brainsci10090642> | PubMed: <https://www.ncbi.nlm.nih.gov/pubmed/32957437>

REFERENCE PAPERS /

SEGMENTATION

SPINE SURGERY

Saß, Benjamin; Bopp, Miriam; Nimsy, Christopher; Carl, Barbara (2019):

Navigated 3-Dimensional Intraoperative Ultrasound for Spine Surgery.

In *World neurosurgery* 131, e155-e169

DOI: <https://doi.org/10.1016/j.wneu.2019.07.188> | PubMed: <https://www.ncbi.nlm.nih.gov/pubmed/31376550>

RADIOTHERAPY

Giaj-Levra, Niccolò; Niyazi, Maximilian; Figlia, Vanessa; Napoli, Giuseppe; Mazzola, Rosario; Nicosia, Luca et al. (2019):

Feasibility and preliminary clinical results of linac-based Stereotactic Body Radiotherapy for spinal metastases using a dedicated contouring and planning system.

In *Radiation oncology (London, England)* 14 (1), p. 184

DOI: <https://doi.org/10.1186/s13014-019-1379-9> | PubMed: <https://www.ncbi.nlm.nih.gov/pubmed/31655620>

Wittenstein, Olaf; Hiepe, Patrick; Sowa, Lars Henrik; Karsten, Elias; Fandrich, Iris; Dunst, Juergen (2019):

Auf einem Gewebemodell basierende automatische Bildsegmentierung zur Konturierung von Risikoorganen in der Behandlungsplanung für spinale Metastasierung.

In *Strahlentherapie und Onkologie : Organ der Deutschen Rontgengesellschaft ... [et al]* 195 (12), pp. 1094–1103

DOI: <https://doi.org/10.1007/s00066-019-01463-4> | PubMed: <https://www.ncbi.nlm.nih.gov/pubmed/31037351>