



Advances in anatomical bases for head and neck surgery

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This new issue of *Surgical and Radiologic Anatomy* is consecrated to head and neck anatomy and surgery. Here are proposed some original studies and relevant anatomical variations related to oral, maxillofacial, and ENT surgery.

The first section of this special issue comprises original works useful in dental implants procedures and in orthognathic surgery. Indeed the knowledge of precise course of the mandibular canal, from the mandibular foramen to the mental foramen, and its variations (accessory foramens, retrorandibular canal, coronoid foramen ...) is mandatory to perform dental implants or pre-implant surgery in maximal safety conditions. Likewise, mandibular sagittal osteotomies are being more and more commonly performed and require optimal knowledge of intramandibular structures to improve the prognosis for sequential disorders of lower lip and chin sensitivity. The use of CBCT (cone beam) in these studies is perfectly in tune with the times and corresponds to the modernity of clinical practice.

Maxillofacial disharmonies result from growth troubles, due to bone abnormalities and/or orofacial dysfunctions. Two original studies of the perinatal mandibular growth patterns and of the intrinsic and extrinsic organizations of the

lingual muscles will fuel discussions on this topic. Finally, an original MRI study of the pterygopalatine ganglion, a neurologic structure potentially injured in Le Fort 1 osteotomies, will conclude this topic.

The second section is dedicated to inner ear anatomy and surgery. Indeed, the treatment of perception deafness requires the installation of cochlear implants whose quality has been significantly improved for several years. Micro-anatomical studies lead to further evolution of these materials. A last study shows microanatomy of the cochlear aqueduct whose function remains unknown. Nevertheless, we cannot help being amazed at such beautiful images!

The various techniques of medical imaging that have been used for these anatomical studies reflect the so much important place of the depiction of anatomy through radiography, microcomputed tomodensitometry, 3D-computed tomodensitometry, magnetic resonance angiography. These performant techniques leave also place to the anatomical examination.

In 2010, a special issue contained publications “Around the mandible”. Eight years after, these topics remain of importance, this field of research is still very active, and we hope anatomists and clinicians will appreciate these advances.

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