EDITORIAL



Anatomical education. Head and neck anatomy

B. Grignon¹ · F. Duparc²

Published online: 16 March 2022

© The Author(s), under exclusive licence to Springer-Verlag France SAS, part of Springer Nature 2022

Keeping in line with the first issue of the year, mainly devoted to Anatomical Education, this fourth SRA 2022 number will begin with Letters to the Editors that are related to this major topic.

The debate about this field of clinical anatomy is intensive, rich and interesting. When we suggested entitling the first editorial "Suddenly back to the future..." we were in fact at the beginning of the major secondary effects of the pandemics on the ways of teaching anatomy. We are receiving more and more manuscripts in this section, and we hope this evolution will contribute to share the different experiences and enhance the development of researching about educational aspects of Anatomy.

In this issue, three main aspects are highlighted. To begin with, regarding the fascinating and important role of modern technologies in the field, here illustrated by the application of three-dimensional reconstruction and printing as a course for undergraduate medical students, very practical issues are discussed and commented. Second, the importance of the human element is reminded and deservedly emphasized. Even the most advanced and exciting educational technology must of course be tested and deemed valuable by both learners and teachers for its educational purpose. Finally, the concept of "student-centered" versus "teacher -centered" teaching in human anatomy is largely debated.

Head and neck anatomy represents another important part

The crucial issue of lost or fragmented bony septum of the optic canal facing the sphenoid sinus during

of this number.

☑ B. Grignon b.grignon@chu-nancy.fr

> F. Duparc fabrice.duparc@univ-rouen.fr

- Department of Anatomy, Faculty of Medicine, University of Lorraine, Avenue de la Forêt de Haye, 54505 Vandœuvre-Lès-Nancy, France
- Department of Anatomy, Faculty of Medicine-Pharmacy, University of Rouen-Normandy, 22 Boulevard Gambetta, 76183 Rouen, France

endoscope-assisted trans-sphenoidal or trans-ethmoidal approach to the sellar and parasellar regions has been investigated by means of a histological study carried out in 22 donated cadavers.

A new anatomic variant of the persistent primitive olfactory artery is reported, as well as an extremely rare case of bilateral vertebral arteries arising distal to the left subclavian artery. New insights into the orbit cavity and its muscles by means of magnetic resonance imaging are proposed. The branching pattern and muscular distribution of the pterygomeningeal arteries have been revisited through anatomic dissection, as was the case for the anatomy of the greater occipital nerve with special respect to its implications in posterior fossa approach. The maxillary artery and descending palatine artery in the pterygopalatine fossa have been evaluated using 3D rotational angiography.

Regarding the cervical spine, the bony bridges of C1 (ponticulus posticus and ponticulus lateralis) that may be of crucial importance during screw placement have been investigated using routine computed tomography images on a large study sample, and a very rare case of isolated atlas-duplication as a manifestation of persistent proatlas is reported.

Recently, it has been hypothesized that the cranial nerves may function as part of the glymphatic system, described as an alternative cerebrospinal fluid pathway. Using magnetic resonance imaging, hyperintense areas found within the cisternal segments of the cranial nerves may indicate the intracranial part of this glymphatic pathway. This is the topic of a study of 70 patients presented in this issue.

Finally, five articles are devoted to lower and upper limbs applied anatomy.

A newly reported muscle (an accessory infraspinatus or a deep layer of the latissimus dorsi) is presented. The bony holes or deficiencies that may lead to radiolucent areas and may be mistaken for sites of osteolytic destruction have been revisited. The anatomical features of the iliocapsularis muscle have been investigated by means of a dissection study, as was also the case concerning the relationships of the superficial fibular nerve and sural nerve with respect to the lateral



malleolus and their implications for ankle surgeons, and the triceps tendon insertion at the proximal olecranon regarding placement of fracture fixation devices.

We wish you an interesting reading.

Publisher's Note Springer Nature remains neutral with regard to jurisdictional claims in published maps and institutional affiliations.

