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Results: A total of 12.722 patients with cervical MR, computed tomography and direct graphs were evaluated and os odontoideum was detected in 21 cases (0.13%). The age range of the cases was between 5 and 64 years. The distribution of the cases by gender was 12 male and 9 female. In order to be able to accurately identify os odontoideum, the points to be considered in radiographic images and the different clinical tables have been determined.

Conclusion: In order to reduce unnecessary consultations and misdiagnoses in the craniocervical region, os odontoideum should be well known in clinical practice. Our study describes the incidence of os odontoideum and the clinical significance of possible pathological conditions. This may contribute to the knowledge and diagnostic processes of clinicians working with the craniocervical region.

Keywords: craniocervical region, dens axis, os odontoideum, variation

P-88

Cortex cerebri terminology in three different books from 17–19th centuries

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Objective: In this study, we reviewed the terminological changes of the structures forming the cortex cerebri taking into account the three anatomy books from different centuries. It is known that detailed drawings of the brain was not made until the depictions of Andreas Vesalius (1514–1564), and before that the brain resembled as the macaroni in a bowl. In later centuries, the "convolutus" word has emerged as a term related to the special appearance of the brain cortex. This term has changed over the time and replaced with the "gyrus" term and similar changes can be traced through historical books.

Methods: In the digital platform we accessed to the entire three books related to the subject: (1) Nevrographia Universalis, published by Raymond Vieussens in 1684, (2) Traité d'anatomie et de physiologie which published in 1869 and belong to the Felix Vicq d'Azyr, (3) Die Hirnwindungen des Menschen nach eigenen Untersuchungen by Alexander Ecker and translated (The Convolutions of the Brain) by John C. Galton et al published in 1786. Within these books only with the drawings and depictions of the *cortex cerebri* and related terminology have been reviewed.

Results: When the drawings of Vieussens were examined, it was observed that he divided the cortex into four quadrants without any naming for gyri or sulci andstudied the brain by separating it into white and gray matter parts. It is interesting that although he examined the cortex separately, he didn't give any name. Vicq d'Azyr used the term "convolution" and described many of them for the first time. He described the *gyrus precentralis* and *gyrus postcentralis* without using Latin terminology. Ecker has been collected and combined the terminology from different scientists.

Conclusion: It is seen that there are some similarities with contemporary *Terminologia Anatomica* and Ecker's publication.

Keywords: cortex cerebri, convolutus, gyrus, history, terminology

P-89

Neural correlates of default mode network connectivity between musicians and non-musicians

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Objective: To investigate the value of image post-processing with medical image analyzing tools, individual brain atlases using web based MriCloud volumetric analyses of the some brain structures such as brain regions and in order to volumetric assessment compared to musicians and non-musicians. Also, the objective of this study is to explore neural correlates of Default Mode Network (DMN) regions in musicians and non musicians using resting-state functional magnetic resonance imaging (rs-fMRI)

Methods: The study included T1-weighted magnetic resonance imaging (MRI) of 14 musicians and 10 non-musicians with 1.5T MRI system. Using a magnetization prepared rapid gradient echo (MPRAGE) sequence with a slice thickness of 1 mm, the volumes of different cerebral regions were calculated using web based parcellation using MriCloud. Statistical differences were examined using student t test analyses accounting for spatial interpretations percent volume difference. Two DMN regions (medial prefrontal cortex (MPFC), the posterior cingulate cortex (PCC) in each one were used as seeds and their functional connectivity with the whole brain was explored and compared between musicians and control groups using t-test ($p<0.05$).

Results: Our results do not indicate statistically significant differences between musicians and non-musicians. We observed that when DMN regions were selected as seeds, the connected regions were different between two groups and were mostly in the right hemisphere in musicians contrary to the left hemisphere in the control group.

Conclusion: In conclusion, neural correlates of DMN regions differ in musicians compared to controls. Our findings suggest that in musicinas, DMN regions show more connectivity with the right hemisphere of the brain whereas the left hemisphere is more functionally connected with DMN in controls. Further research is required to explore this atypical DMN connectivity using larger cohort.