Society News

European Confederation of Neuropathological Societies

Dear Colleagues,

Starting this issue, we will present to you a "quiz" based on the papers and the editorial of the previous issue. We hope to develop this piece of e-learning stepwise and aim at formal recognition and accreditation in the future. We are grateful to Dr. Ingeborg Fischer (Institute of Pathology at Kantonsspital Aarau, Switzerland), who prepared the questions for the quiz.

We also have an update from the Swiss Society of Neuropathology, submitted by Dr. Eniko Kovari, Councilor for Euro-CNS. A new formal status of Neuropathology has been implemented. Future neuropathologists are allowed to practice diagnostic neuropathology independently, but are considered to be interdisciplinary specialists, instead of being considered as specialist of neuropathology (FMH titel).

The Italian Association of Neuropathology and Clinical Neurobiology announces the new dates of its (postponed) Annual Congress. The new dates are May 20 – 22, 2021 in Trieste.

With kind regards,

The Euro-CNS News Editorial Team

From the Swiss Society of Neuropathology

Neuropathology training in Switzerland has received a new formal status as of January 2020. A Neuropathology Diploma bestowed by the Swiss Medical Association (Foederatio Medicorum Helveticorum; FMH) had first been introduced in 2007 and greatly contributed to standardization and recognition of Neuropathology training in Switzerland. Changes in legal requirements have now made it necessary to define a new formal status for Neuropathology training. The Swiss Society of Neuropathology (SSNPath) and FMH have agreed that defining Neuropathology as an "interdisciplinary specialization" will provide a sustainable basis for future developments. As an unfortunate consequence, Neuropathology is no longer listed among the independent medical specialties, but this was deemed inevitable as the Federal Department of Home Affairs had never formally accredited the prior diploma. Importantly, the new diploma can still be obtained without the need for prior board certification in general pathology. Furthermore, this adaptation comes along with the benefit of clearly defined requirements for continuous re-certification.

Otherwise, SSNPath has taken the opportunity to update the curriculum, for example with regard to molecular diagnostics. The general outline of the 5-year curriculum remains unaltered in that it requires 3 years of neuropathology (one of which can be completed in a smaller neuropathology unit), 1 year of general pathology, and 1 year of either clinical or basic neurosciences. Equally unchanged remains the rigorous 1.5-day final examination addressing all aspects of Neuropathology in practical, oral and written format. Details on the training program can be found on the website of the Swiss Institute for Postgraduate and Continuous Medical Education (SIWF/ISFM), the subsidiary organization of the FMH for postgraduate medical education: **www.siwf.ch**

Submitted by Enikö Kovari, Euro-CNS Councilor for the Swiss Society of Neuropathology

From the Italian Association of Neuropathology and Clinical Neurobiology

Postponement Annual Congress of the Italian Association of Neuropathology and Clinical Neurobiology

Dear Euro-CNS Members,

As you all probably imagine, the Annual Congress of the Italian Association of Neuropathology and Clinical Neurobiology, initially planned in Trieste in May, will not take place this year. Our conference will be held from May 20 – 22, 2021 in Trieste; Prof. Gabriella Marcon will be the President. The program will be the same as it would have been this year, and we expect the same speakers to be available for those dates.

Submitted by Francesca Fusco, MD, Secretary of the Italian Association of Neuropathology and Clinical Neurobiology

Neuropathology Quiz

As of June 2020, each issue of Clinical Neuropathology will have a quiz, with questions based on the papers and the editorial of the previous issue. The answers are published on the Euro-CNS website:
https://www.euro-cns.org/journal/journal-quiz/

Quiz #1, June 2020

Questions are based on papers and editorial of *Clinical Neuropathology,* **Volume 39 (2020), No. 3/2020 (May/June).**

Clinicopathological concordance in cognitive disease diagnostics

1. Which of the following conditions has the lowest clinicopathological concordance in the study conducted by Andersson et al.?

a – Lewy body dementia
b – Alzheimer's disease
c – Mixed dementia
d – Vascular dementia
e – Creutzfeldt-Jakob disease

2. All of the following statements regarding clinicopathological concordance as reported by Andersson et al. in cognitive disease are valid EXCEPT

a – Full clinicopathological concordance was found in close to two thirds of the cases
b – The clinicopathologic concordance for a diagnosis of "mild cognitive impairment" could not be determined for lack of a defined neuropathological correlate
c – The high concordance for FTLD may be due to selective referral and high level of expertise at the center which conducted the study
d – In Alzheimer's disease, the clinicopathological concordance reached more than 50%
e – The clinicopathological concordance in cognitive disease diagnostics has improved over the last decades

MicroRNA and HDAC4 Protein expression in the skeletal muscle of ALS patients

3. Which of the following statements regarding ALS is true?

a – Neurodegeneration in ALS may be caused by a dysfunction in RNA metabolism pathomechanism may be an impairment in RNA regulation
b – Most cases of ALS are sporadic
c – RNA-binding proteins such as TDP43, FUS, and hnRNP a1 are implicated in ALS pathology
d – More than 100 mutations of the SOD1 gene have been linked to ALS pathology
e – All of the above

4. All of the following observations on miRNA and HDAC4 Protein expression in the skeletal muscle of ALS patients have been made by Pegoraro et al. EXCEPT

a – In sporadic ALS there is a decrease in expression HDAC4 protein
b – The expression of least one of the inflammatory/apoptotic miRNAs was observes in all ALS cases when compared to control cases
c – There is an upregulation of miR-206 in SOD1-ALS and C9-ALS
d – Muscle-specific miRNAs and inflammatory miRNAs are differentially expressed in different forms of ALS
e – There was no difference in the expression of miR133a and miR-133b in ALS compared to the control group

Cystic sellar salivary gland-like lesions

5. Which of the following statements about heterotopic salivary gland tissue is correct?

a – Salivary gland tissues in the pituitary gland are referred to as "Walthard cell nests"
b – Heterotopic salivary gland tissue exclusively occurs in the pituitary gland
c – Heterotopic salivary gland tissues in the pituitary gland are clinically symptomatic in most cases
d – Heterotopic salivary gland tissues are neoplastic in nature
e – Tumors such as oncocatoma and pleomorphic adenoma may arise from heterotopic salivary gland tissue

6. All of the following statements regarding cystic sellar salivary gland-like lesions are correct EXCEPT

a – CSSL features emorphous eosinophilic colloid, cuboidal epithelial lining, and salivary gland acini
b – The salivary gland tissue in CSSL consists exclusively of serous glands
c – CSSL may have display oncocytic change of the salivary gland acini
d – CSSL may present with endocrinologic abnormalities
e – None of the above

High-grade glioma with SOS1 amplification

7. Which of the following assertions regarding MAPK signaling in gliomas is correct?

a – The MAPK signaling pathway is exclusively activated by increased phosphorylation at receptor tyrosine kinases
b – EGFR amplification leads to increased MAPK signaling

c – In pilocytic astrocytomas, the KIAA1549-BRAF fusion leads to inactivation of BRAF
d – Altered MAPK signaling in pilocytic astrocytomas is due to a BRAF mutation in most cases
e – Activating mutations of EGFR have not been described in gliomas

8. In the case of a high-grade glioma reported by Vidal et al., all of the following observations were made EXCEPT

a – The authors report a high-grade glioma with necrosis and vascular proliferation adjacent to a low grade component with glioneuronal morphology
b – Amplification of SOS1 at 2p22.1 was seen
c – The amplification of the SOS1 gene was found in both the high-grade and the low-grade component
d – Microarray-based comparative genomic hybridization revealed a loss of chromosome 1 with deletion of PTEN
e – aCGH revealed a copy gain at 5p15.33 containg TERT

High mitotic activity in a capillary hemangioma of the cauda equina

9. Which of the following statements regarding vascular lesions of the spinal cord is correct?

a – Less than 10% of intradural lesions are of vascular origin
b – Hemorrhage of a vascular lesion may lead to acute onset of neurologic symptoms
c – Spinal vascular tumors include arteriovenous malformations, teleangiectasis, capillary hemangiomas, and cavernous angiomas.
d – All of the above
e – None of the above

10. All of the following statements regarding intradural capillary hemangiomas are correct EXCEPT

a – Capillary hemangiomas are typically lobular in architecture
b – The vascular spaces are lined by CD31-positive endothelial cells
c – Intradural capillary hemangiomas, much like their counterpart of skin and soft tissue, are often associated with high mitotic activity
d – On MRI imaging, capillary hemangioma may appear similar to schwannoma and meningioma
e – Intradural capillary hemangiomas have no obvious gender predilection

Submitted by Ingeborg Fischer, Institute of Pathology at Kantonsspital Aarau, Switzerland