NEWS

In this issue

Some articles in this issue might be potentially interesting for you; we would like to draw your attention on them.

Rosen et al. (https://doi.org/10.1007/s00428-021-03222-2) studied granuloma-inciting cells seen associated with seeds and their contents originating from a variety of leguminous and non-leguminous plants (illustrated on the cover page). They found that the cells triggering the formation of pulse granulomas/hyaline ring granulomas are storage cells that are derived from ingested seeds of leguminous and non-leguminous plants. Therefore, they suggested to leave the historical term of pulse granulomas/hyaline ring granulomas and to adopt the term of seed storage cell granuloma which is able to reflect more accurately the etiology of these lesions.

Reuling et al. (https://doi.org/10.1007/s00428-022-03279-7) studied a series of paired biopsies and resection specimens of typical and atypical carcinoids of the lung to determine the diagnostic accuracy of atypical carcinoids in biopsies. They found out that the diagnostic discordance was influenced by a biopsy size less than 4 mm^2. The use of Ki-67 showed a good concordance but was unable to discriminate between typical and atypical carcinoids irrespective of the biopsy size. Therefore, the authors recommend to make the diagnosis of atypical carcinoid on a biopsy in case of sufficient mitosis on a biopsy and to keep the diagnosis carcinoid NOS if ≤ 1 mitosis per 2 mm^2 is visible.

Lee et al. (https://doi.org/10.1007/s00428-021-03260-w) analyzed colorectal carcinomas for the expression of cdx2, SATB2 and keratin 20 based on the TCGA molecular classification. They found that MSI-H and/or CIMP-H are major common correlates with decreased or lost expression of cdx2, SATB2 and keratin 20 but with differences on the RNA and protein level. On the m-RNA level, downregulation of CDX2 or SATB2 was dependent on both MSI-H and CIMP-H, whereas that of keratin 20 was more dependent on MSI-H than on CIMP-H. In contrast, decreased immunoreactivity of CDX2 and SATB2 was more dependent on CIMP-H than on MSI-H. Decreased expression of keratin 20 was more dependent on MSI-H than on CIMP-H. Cases with concurrent loss of all three markers were found exclusively in MLH1-methylated MSI-H/CIMP-H colorectal carcinomas. Based on these findings, it needs to be stressed that a subset of colorectal adenocarcinomas may reveal an "atypical" immunoreactive pattern.

Aizawa et al. (https://doi.org/10.1007/s00428-021-03221-3) studied the issue of measuring the depth of submucosal invasion in early (pT1) colorectal carcinomas and compared European and Japanese guidelines. Since the Japanese approach tends to lead to an overestimation in cases where the muscularis mucosae cannot be determined, they proposed a modified approach, which excludes the remaining intramucosal lesion from the measurement of the depth of submucosal invasion. This modified approach was not influenced by a polypoid structure of the tumor but was effective in a small subset of cases without risk factors in which surgery could have been avoided. This proposal is promising but needs to be tested and confirmed by independent groups.

Notohara et al. (https://doi.org/10.1007/s00428-021-03236-w) studied the interobserver agreement among 20 pathologists (both specialists and generalists) regarding the diagnosis of type 1 autoimmune pancreatitis, including the distinction from pancreatic ductal adenocarcinoma using large tissue samples obtained by EUS-FNB under diagnostic guidance. Discordant results were caused by ambiguous findings and biopsy tissue limitations. Among the specialists, the number of cases with perfect agreement increased during round 2 with respect to certain histological features. Due to some ambiguities, the histological diagnostic levels based on the diagnostic criteria of type 1 autoimmune pancreatitis should not be taken for granted. Guidance is effective for improving diagnostic accuracy of pancreatic ductal adenocarcinoma and for evaluating storiform fibrosis. This important study shows on a particular example the diagnostic difficulties pathologists even with specialization are facing in areas with complex and uncertain histological features.

Alfsen et al. (https://doi.org/10.1007/s00428-021-03242-y) proposed on behalf of the Working Group of Autopsy Pathology of the European Society of Pathology (ESP) a code of practice as a minimum standard for centers

performing medical autopsies. The authors present minimum standards for organization, standard of premises, staffing conditions, as well as minimum requirements for level of expertise of the autopsy performing specialists, documentation, and turnaround times. They conclude that medical autopsies should be performed by specialists in pathology or by trainees under the supervision of such specialists. To maintain the required level of expertise, autopsies should be performed regularly and in a minimum number of at least 50 cases per year which ensures the maintenance of good practice of all participating physicians. Turnaround time for final reports should not exceed three weeks if fixation of brain/spinal cord or other time-consuming additional examinations are not necessary. This position paper is a useful effort to maintain or reach a certain standard for autopsies in Europe and underlines the importance of medical autopsy for quality assurance in medicine but also for training of specialists in pathology.

Last but not least, this issue contains 2 articles on COVID-19. Marino et al. (https://doi.org/10.1007/s00428-021-03262-8) report on variable levels of spike and ORF1ab RNA in post-mortem lung samples by comparing in situ hybridization and RT-PCR. Brandner et al. (https://doi.org/10.1007/s00428-021-03263-7) report on the contamination of personal protective equipment during autopsies.