

Methods: A 44-year-old male presented with a 10-month history of weight loss, epigastric pain, inability to eat and vomiting. In endoscopic examination, an ulcerated mass lesion of 7–8 cm in diameter in the antrum was detected. The endoscopic biopsy was reported as adenocarcinoma and total gastrectomy was performed.

Results: In the gastrectomy specimen, an ulcerated tumour (Borrmann Type III) measuring 8x6.5x1.7 cm was observed in the antrum on the lesser curvature. Histologically, the tumour was composed of differentiated areas with glandular structures and poorly differentiated areas consisting of individually infiltrating malignant cells. The cells in both components have abundant cytoplasm containing eosinophilic coarse granules and centrally located nuclei. The cytoplasm of tumour cells was strongly immunoreactive for lysozyme and showed dPAS positivity. The findings were compatible with Paneth cell carcinoma. The tumour was staged as pT4aN3a with metastasis in 11 lymph nodes. The patient did not receive adjuvant treatment and has been living disease-free for 10 months.

Conclusion: Although rare, Paneth cell carcinoma has unique histopathological features. One should be aware of this rare gastrointestinal adenocarcinoma subtype to diagnose. Because of its rarity, its pathogenesis and prognostic features are still needed to be established by larger series.

E-PS-06-049

A rare case of synchronous gastrointestinal stromal tumour and primary peritoneal mesothelioma - coincidental or not?

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Background & objectives: Gastrointestinal stromal tumour (GIST) represents the most common mesenchymal neoplasm of the digestive system and is frequently diagnosed with other types of primary malignancies. Nonetheless, primary peritoneal mesothelioma (PPM) occurs rarely even individually, thus a synchronism with GIST is exceptional.

Methods: We present the case of a 78-year-old female patient without relevant medical or occupational history, who presented to our clinic with complaints of diffuse abdominal pain and weight loss. After careful clinical and imagistic examination, the suspicion of GIST with diffuse peritoneal metastasis was raised. Patient underwent surgery where the gastric growth and a fragment of peritoneal tumour were excised.

Results: By means of histopathologic and immunohistochemistry analysis, we confirmed the diagnosis of gastric GIST that developed strong positivity for CD34, c-kit and DOG1 and was classified within the second prognostic group (with a 1.9% chance of progressive disease). The peritoneal growth surprised us from the beginning, as it did not share any morphological features with the gastric counterpart. The histology revealed a proliferation composed of epithelioid and spindle cells suggesting a carcinoma with sarcomatoid differentiation. The tumour tested positive for calretinin, WT1, caldesmon, CK 5/6, CK 7 and podoplanin, which was consistent with the diagnosis of biphasic peritoneal mesothelioma.

Conclusion: Primary peritoneal mesothelioma, although infrequent, is a diagnosis that must be acknowledged, because it has a different therapeutic management as compared to peritoneal metastasis. There are very few cases in literature that report similar associations between GIST and mesothelioma, one of them actually suggesting VEGF as a possible factor linking these divergent malignancies. Standardized research on other molecular interactions between co-existing tumours could change our whole approach on this matter.

E-PS-06-051

Histopathological evaluation of gastrointestinal stromal tumours

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Background & objectives: Gastrointestinal stromal tumours (GIST) are rare tumours that account for less than 0.2% of all gastrointestinal system tumours. We aimed to investigate the histopathological and clinicopathological features and survival of GIST cases in our archive of the last 6 years.

Methods: Demographic, histopathological and clinicopathological data of cases diagnosed with primary GIST in Istanbul Medipol University Faculty of Medicine Department of Pathology between 2016–2022 were evaluated retrospectively.

Results: Seventy eight primary GIST cases were evaluated. Forty two (53.8%) of the cases were male and 36 (46.1%) were female. The mean age at the time of diagnosis was 59 (range: 33–91). Fifty of the tumour cases (64.1%) were located in the stomach. The mean number of mitosis was 7.1 in 50 high magnification fields, 48 cases with ≤ 5 and 30 cases with > 5 were detected. The mean Ki-67 proliferation index was 6.4%. Liver metastasis was detected in 7 of the cases with primary diagnosis, and lymph node metastasis was detected in 2 of them.

Conclusion: Standardization of histopathological reporting is of great importance for risk assessment in GIST cases.

E-PS-06-052

Evaluation of mismatch repair status in colorectal carcinoma

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Background & objectives: Colorectal carcinomas are among the most common malignancies in terms of morbidity and mortality worldwide. This study aims to analyse the mismatch repair (MMR) status and histomorphological features of cases with colorectal carcinoma.

Methods: Patients with a histological diagnosis of colorectal carcinoma in our hospital in the last 6 years were included in the study. Immunohistochemical techniques for the expression of MMR proteins (MLH-1, MSH2, MSH6, and PMS-2) were performed. MMR status and histomorphological features of the cases were analysed.

Results: Nuclear expression was observed in DNA mismatch proteins in 167 (89.7%) of the cases, while nuclear expression was lost in 19 (10.2%) cases. In the mismatch deficient group, 12 cases showed nuclear loss of MLH-1 and PMS-2, 5 cases showed nuclear loss of MSH-2 and MSH-6, and 2 cases showed nuclear loss of PMS-2. It was observed that the right colon involvement was prominent, including 15 of the 19 cases in the mismatch deficient group, right colon, 3 left colons, and 1 transverse colon tumour, but cases with left colon involvement were also seen.

Conclusion: It is known that mismatch deficient tumours are associated with a better prognosis. We think that the routine application of mismatch deficient immunohistochemical examination to all colorectal carcinoma cases may be important in terms of clinical guidance for cases without clinical and histomorphological features.

E-PS-06-053

Morphometric parameters of esophageal mucous in young people with gastroesophageal reflux disease and autoimmune thyroiditis

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Background & objectives: Gastroesophageal reflux disease (GERD) takes one of the leading positions in internal organs` pathology with comorbidity. Objective of our work was evaluation of morphometric parameters of the esophageal mucous membrane in young people with GERD and autoimmune thyroiditis (AIT).

Methods: Patients with GERD and AIT (main group) and 45 people with isolated GERD (comparison group) matched for age, gender, and social status were examined. The mean age in the groups was 21.9 ± 2.7 and 21.2 ± 2.4 years. Morphometric parameters were obtained (total thickness of the epithelium, basal layer thickness, the height of connective tissue papillae, and intercellular space).

Results: The histological study showed that in patients with GERD and AIT all the morphometric parameters studied had a significantly more severe course and exceeded similar indicators of the group with isolated GERD: epithelium total thickness 319.3 ± 9.1 μm against 286.1 ± 8.2 μm ($p < 0.01$), epithelium basal layer thickness 79.6 ± 3.2 μm versus 49.7 ± 2.1 μm ($p < 0.01$), connective tissue papillae height 224.8 ± 7.3 μm against 172.7 ± 4.6 μm ($p < 0.01$), intercellular space 1.55 ± 0.11 μm versus 1.12 ± 0.09 μm ($p < 0.01$). Considerable aggravation of the deviations in patients with AIT may reflect the involvement of an additional autoimmune inflammatory component in the pathological process.

Conclusion: GERD and euthyroid AIT comorbidity in the student population is accompanied by statistically more pronounced disorganization of esophageal mucosal epithelium compared with isolated GERD. The obtained data allow us to consider concomitant AIT as an unfavorable prognostic factor in the progression of GERD in the student population.

E-PS-06-054

Did the COVID-19 pandemic impact the presentation and management of colorectal cancer in a Tunisian population?

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Background & objectives: The implemented measures during the COVID-19 pandemic disrupted health care access, especially in low income countries. We aimed to determine the impact of the COVID-19 pandemic on management and presentation of colorectal cancer (CRC) in a Tunisian population.

Methods: We selected two groups of patients with newly diagnosed and treated CRC in Salah Azaiez institute, in the pandemic era (1 March 2020-1 December 2021) and in a corresponding time interval of the prepandemic era (1 March 2020-1 May 2018). Clinicopathological data were retrieved from pathological reports and compared between the two groups.

Results: The number of newly diagnosed CRCs was lower in the pandemic era (49 cases versus 82 cases). These patients presented at a significantly ($p < 0.01$) younger age and with a greater tumour size (median age of 58 versus 62 and tumour size of 40 mm versus 30 mm). Among patients prescribed neoadjuvant treatment, 78% accessed it in the pandemic interval versus 70% in the second group. Lymph node involvement was significantly higher in patients of the prepandemic interval (51% versus 30%, $p = 0.02$). There was no difference in T stage presentation ($p = 0.2$), lymphovascular invasion rates ($p = 0.3$) and tumour regression rates ($p = 0.1$) between the two cohorts.

Conclusion: Although the demographic characteristics of patients with CRC diagnosed in the pandemic era were worse, there was no

difference in histopronostic factors and health care access. With limited resources, tunisian health care system seemed to resist COVID-19's pandemic impacts.

E-PS-06-055

Tumour budding: a strong and reproducible prognostic marker in stage II colorectal carcinoma

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Background & objectives: StageII colorectal carcinoma is a heterogeneous group with a 5-year survival ranging from 32,3% to 66,5%. Recently, tumour budding (TB) has been recognized as a strong prognostic factor to select a subset of patients who may benefit from adjuvant therapy

Methods: 172 stage II colorectal carcinoma (CRC) patients with known outcome have been identified between 2007 and 2014. TB was defined as single tumour cells or clusters of < 5 cells at the invasive tumour front. It was assessed by two different pathologists using the hot spot method. A score using a 3-tier system and a grade were finally attributed.

Results: 47 (27,4%) carcinomas had high and 125 (72,6%) had low budding scores. High grade budding was associated with an infiltrative growth pattern ($p < 0,001$), lymphovascular invasion ($p = 0,011$), neural invasion (0,002) and intratumoural lymphocyte infiltrate ($p = 0,003$). Five-year cancer-specific survival was significantly poorer in high compared with low budding groups: 68% versus 80% ($P = 0.023$). Multivariate analysis demonstrated tumour budding to be an independent prognostic factor (hazard ratio=2,33, $P = 0.012$). Interobserver agreement was moderate for both score and grade: 74,4% agreement ($k = 0.4$) versus 66,9% agreement ($k = 0.23$), respectively.

Conclusion: In view of these findings, the use of TB as a reproducible and independent prognostic marker, easily assessed on hematoxylin and eosin slides, to identify a subset stage II CRC patients at high risk of recurrence and who may benefit from adjuvant therapy, had been advocated.

E-PS-06-056

A retrospective study investigating how common serrated adenocarcinomas are and whether it is possible to identify from morphology and immunohistochemistry

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Background & objectives: Sessile serrated adenocarcinoma is a challenging subtype that is rarely used in pathology reports. In previous studies the CK7+/CK20+ pattern of expression is displayed in serrated adenocarcinomas. In this project we tested such an expression retrospectively.

Methods: Haematoxylin and eosin (H&E) analysis on 100 cases of primary CRC samples identified serrated morphology on 37% of cases. Immunohistochemistry (IHC) staining using CK7 (clone: SP52; pre-diluted; ROCHE Diagnostics, Switzerland) and CK20 (clone: SP33; pre-diluted; ROCHE Diagnostics, Switzerland) antibodies was carried out via Ventana automatic Immunostainer (BenchMark Ultra IHC/ ISH System).

Results: CK7+/CK20+ pattern of expression was present in 21% of cases. 11% of CRC cases studied displayed general CK7+/CK20+ expression, as well as that same pattern in both serration and tumour components specifically. This evidence supports Hirano, et al., 2019 findings in which it is considered that the