

VIRCHOWS ARCHIV

European Journal of Pathology

Volume 477 · Supplement 1 · December 2020

62913 Photographic Unit, University of Glasgow

32nd Congress of the
European Society of Pathology
and
XXXIII International Congress of the
International Academy of Pathology

6 – 8 December 2020

www.asp-congress.org
www.iaip2020.com

Abstracts

jointly sponsored by
→ European Society of Pathology
→ British Society of Pathology

 Springer

428 · 477(S1) S1-S390 (2020)
ISSN: 0945-6317 (print)
ISSN: 1432-2307 (electronic)

 European
Society of
Pathology

Background & objectives: Adenocarcinoma with little glandular formation is classified as poorly differentiated adenocarcinoma (PDA) including signet-ring cell carcinoma (SRCC), non-solid type PDA and solid-type PDA. The present study aimed to clarify the relationship among clinicopathological and molecular features of gastric PDAs.

Methods: We randomly collected 154 PDAs (75 solid-type PDAs, 52 nonsolid-type PDAs, and 27 SRCC) from 154 patients. According to the method by Gonzalez et al., PDAs were classified into 4 groups using immunohistochemistry and in situ hybridization: EBV-associated GCs (EBV), microsatellite-unstable GCs (MSI), chromosomal-unstable GCs (CIN), and genomically stable GCs (GS). These clinicopathological variables were analysed statistically.

Results: Solid-type PDA showed significantly higher proportion (44%) of MSI in comparison with those (4% and 7%) of non-solid-type PDA and SRCC, respectively. Although most of non-solid type PDA and SRCC showed CIN and GS, proportion (85%) of GS in SRCC was significantly higher than that (48%) in non-solid-type PDA. In addition, SRCC preferred to occur in the middle third (70%) whereas non-solid type PDA developed in both middle third (35%) and lower third (35%).

Conclusion: These results suggest that solid-type PDA is different tumour from non-solid type PDA and SRCC. Moreover, although non-solid type PDA and SRCC shared several features, it is possible that SRCC which maintains signet-ring morphology is different from tumour which can transfer to non-solid type PDA.

Funding by: Governmental grants

PS-21-008

Topical application of high dose mesna prevents adhesion formation: an experimental animal study

G. Arslan*, M. Berkeşoğlu, Y.Y. Karabulut, D. Derici Yıldırım, Ö.M. Türkmenoğlu, M.M. Dirlik

*Department of Pathology, Faculty of Medicine, Mersin University, Turkey

Background & objectives: Adhesions are common complications of abdominal surgeries. Mesna is a drug used in surgical field to facilitate tissue dissection. The aim of this experimental animal study was to investigate the effect of mesna on prevention of intraabdominal adhesion in rats.

Methods: 28 Wistar albino rats were used in the study. Cecum was abraded to create abdominal adhesion. No surgeries were performed other than adhesion in Group 1. 0.9% saline administered to Group 2, 40 mg/kg mesna for Group 3 and 400 mg/kg mesna for Group 4. Rats were sacrificed on postoperative 21st day. Histopathological and macroscopic evaluations of adhesion were performed.

Results: There were statistically significant differences in median severity, quantity, and total adhesion scores, but there were no statistically significant differences in median degree of adhesion scores. Group 4 had lower median quantity score than Group 1 ($p < 0.038$) and 2 ($p = 0.049$). Group 4 rats had lower median severity score ($p = 0.042$) and median total score ($p = 0.038$) than Group 2. Although there were no statistically significant differences in median degree of adhesion scores, Group 4 rats had lowest median degree of adhesion score than others. There were significant differences in median histopathological grading scores between the groups. Group 4 had lower median adhesion grading score than Group 1 ($p < 0.001$) and Group 2 ($p = 0.003$).

Conclusion: This is the first study for mesna on prevention of abdominal adhesion in rats. We concluded that dose-dependent reduction of adhesion was achieved by mesna which may indicate it as a potential adhesion-preventing agent for abdominal surgeries in the future.

PS-21-009

Histopathologic assessment of appendectomy specimens in elderly patients

E.S. Ayva*, P. Aydin Aribal, I.M. Gocer, B.H. Ozdemir

*Baskent University, School of Medicine, Department of Pathology, Turkey

Background & objectives: The aim of our study is to determine the histopathological findings of appendectomy specimens in elderly patients who were over the age of 60.

Methods: Histopathological records of 130 appendectomy specimen submitted to the pathology Department at Baskent University in Ankara between 2011-2020 were reviewed retrospectively. The demographic data of 130 patients (59 males, 71 females; age range, 61-96 years) were noted. Histopathological diagnosis, acute appendicitis, gangrene and perforation rate, negative appendectomy rate, and unusual findings on histology were recorded.

Results: Out of the 130 cases, acute appendicitis were detected in 104 (80%) specimens. Perforation rate was %38, gangrene rate was 18% and negative appendectomy rate was 1%. There was no statistically significant difference between males and females in the rate of perforation and gangrene. Low grade appendiceal mucinous neoplasm ($n=8$), carcinoid tumour ($n=2$), adenocarcinoma ($n=1$), diverticular disease ($n=4$), serrated polyp ($n=3$), hyperplastic polyp ($n=13$) and adenomatous polyps ($n=14$) were observed.

Conclusion: The findings suggest that acute appendicitis is the main histopathological findings in elderly population. In spite of the fact that the rate of acute appendicitis is high, precursor lesions and neoplasia were detected in 31.5% of specimens. Therefore, appendectomy specimens should be subjected to careful histologic examination in this age group.

PS-21-010

Comparative analysis of PD-L1 as prognostic factor in stage II and III colonic adenocarcinomas with the expression of mismatch repair proteins

P. Azcue Sanroman*, M. Mercado, A. Galbete, J. Suarez, L. Álvarez, D. Guerrero-Setas, I. Encío Martínez, M. Gómez-Dorronsoro

*Institut de Recherches Internationales Servier. Paris, France, Spain

Background & objectives: Results of PD-L1 expression in colon carcinoma are heterogeneous, due partly to antibody selection and expression assessment, rendering its prognostic value unclear. We aim to study the prevalence and disease-free survival of PD-L1 expression and its relationship with MMR proteins.

Methods: Tissue microarrays (TMA) of 144 paraffin embedded tissue samples from early stage colon carcinoma patients were constructed. TMAs included four samples of central and infiltrative areas of each patient and were automatically stained for PDL-1 (SP142) and MMR proteins (MLH1/PMS2, MSH2/MSH6). PDL-1 expression was assessed in the tumour- stroma interface.

Results: Prevalence of deficit MMR proteins was (12.5%) and (20.1%) for PDL-1. The latter was significantly more expressed in deficient MMR tumours ($p < 0.001$), right-sided localization and providing a better relapse-free survival $p(\log\text{-rank}) = 0.012$. Additionally, the lack of PDL-1 presented a HR (95% CI) of 2.15 (0.91, 5.04) consistent with previous results. In the infiltrating zone, tumour-associated immune cells were more intense and frequent in PDL-1 expression compared to tumour cells.

Conclusion: The presence of PDL-1 in microsatellite stable tumours seems protective for both OS and RFS, while lack of expression confers a worse prognosis. Pathological assessment of PDL-1 is determinant, outstandingly if any trace of PDL-1 expression is considered positive "PDL-1 Sensitive", it reaches statistical significance for OS and DFS