PS-11-067

Prognostic impact of lymph node ratio outperforms positive lymph nodes and lymph nodes harvested: A time-dependent analysis in mismatch repair-proficient and -deficient colorectal cancers

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Objective: We compare the prognostic strength of the lymph node ratio (LNR), positive lymph nodes (+LNs) and collected lymph nodes (LNcoll) using a time-dependent analysis in colorectal cancer patients stratified by mismatch repair (MMR) status. **Method:** 580 stage III-IV patients were included. Multivariable Cox regression analysis and time-dependent receiver operating characteristic (tROC) curve analysis were performed. The Area under the Curve (AUC) over time was compared for the three features. Results were validated on a second cohort of 105 stage III-IV patients.

Results: The AUC for the LNR was 0.71 and outperformed + LNs and LNcoll by 10–15 % in both MMR-proficient and –deficient cancers. LNR and + LNs were both significant (p < 0.0001) in multivariable analysis but the effect was considerably stronger for the LNR [LNR: HR=5.18 (95 % CI: 3.5–7.6); +LNs=1.06 (95 % CI: 1.04–1.08)]. Similar results were obtained for patients with >12 LNcoll. An optimal cut-off score for LNR=0.231 was validated on the second cohort (p < 0.001).

Conclusion: The LNR outperforms the + LNs and LNcoll even in patients with >12 LNcoll. Its clinical value is not confounded by MMR status. A cut-of score of 0.231 may best stratify patients into prognostic subgroups and could be a basis for the future prospective analysis of the LNR.

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Prognostic value of tumor-stroma ratio in rectal adenocarcinomas

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Objective: Recently, tumor-stroma ratio (TSR) has been identified as a strong predictor for survival in colorectal cancer. Despite an identical biology clinical implications are quite different for colon and rectal cancer regarding to anatomical differences.

Method: TSR was estimated on H&E stained histological sections of 154 patients who underwent resection for rectal adenocarcinoma between 1996 and 2006. None of these patients had received neoadjuvant chemo- or radiotherapy. The TSR was determined, by two independent investigators, in different layers of the rectal wall at the point of highest tumor infiltration and at the border of the tumor. TSRs were categorized into three categories: TSR-low, TSR-moderate and TSR-high.

Results: Patients with stage I and II disease (T1-4 N0) and TSR-high showed significantly better 5 year survival rates for overall survival compared to TSR-low and TSR-moderate (p=0.010) and a trend to a better disease specific survival (p=0.067) and disease free survival (0.057). In a multivariate Cox regression analysis the TSR remained an independent prognostic factor for overall survival, when adjusted for age, pT-status and grading.

Conclusion: TSR as a prognostic tumor characteristic can be used to identify patients with a good and a poor outcome in lymph node metastasis negative cases.

PS-11-069

A mixed neuroendocrine tumor loceted in appendix vermiformis: "Goblet cell carsinoid"

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Objective: Goblet cell carcinoid (GCC) of appendix vermiformis is a rare neoplasm that share histological features of both adenocarcinoma and carcinoid tumor. While its malignant potential remains unclear, GCC's particularly show transmural dissemination and are more aggressive than conventional carcinoids. Patients usually present with acute appendicitis. They usually lack the formation of a well-defined tumor mass; thus, it is somewhat difficult to accurately assess their size.

Method: Case Presentation: Fifty years old male patient applied to the emergency service with abdominal pain and laparatomy was performed with suspicion of acute appendicitis. Grossly, conjestion and exudation on the distal edge of appendectomy material were seen. A 1×1 cm lesion which was spreading into peripheral adipose tissue was seen on the cut surface. Microscopically, tumor was composed of goblet cell groups resembling "signet ring cells". Tumor was infiltrated into muscularis propria and mesoappendix. Immuno-histochemically, chromogranin, synaptophysin, cytokeratin 20, mCEA and p53 were stained positive. Ki67 (MIB 1) proliferation index was 18 %.

Conclusion: Adenocarcinoid of the appendix is a rare tumor, which is very difficult to diagnose preoperatively and even macroscopically, making histological examination essential. Immunohistochemical staining is required for definitive and differential diagnosis. Here, we present this rare case with literature reviewed.

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Normal colon tissue and colon carcinoma show no difference in heparanase promoter methylation

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