Conclusions: Pancreatic cancer has one of the lowest survivability ratings of all human cancers. Hopes are based on the development of more active molecules and of means contributing to early diagnosis or even screening.

Legal entity responsible for the study: The authors.

Funding: Has not received any funding.

Disclosure: All authors have declared no conflicts of interest.

https://doi.org/10.1016/j.annonc.2021.05.304

P-251 Multidisciplinary challenge for the oncologist and surgeon: Gastrointestinal stromal tumors. Follow-up of a tertiary surgical department

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Background: Gastrointestinal stromal tumors (GISTs) are the most common mesenchymal tumors in gastrointestinal system with most found in stomach. With the characteristic of being mostly c-KIT positive (CD117) as a mutation carrier, genetics is a part of the management of GIST, helping both the surgeon and the oncologist. The diagnosis and the definition of the characteristics of tumor will help to define the response to treatment procedures, which is fundamental for oncologists and surgeons to create an algorithm for their patients. The follow-up should be done both with oncologists and surgeons in order to define early recurrences and metastasis. This study is based on the follow-up of GIST patients operated in a tertiary general surgery department.

Methods: 43 patients have been operated on between January 2017-December 2018. Routine preoperative diagnostic findings and postoperative pathological evaluations are identified and noted. In our hospital, routine management of GIST is as follows: In case of high grade GISTs, postoperative adjuvant imatinib therapy is routinely given for three years, and if there is metastasis or locally unresectable tumor, neoadjuvant imatinib treatment is given for shrinking the primary tumor and curing the systemic disease before the surgery. As the primary and golden treatment of GIST is surgery, surgery is always an option for even metastatic disease.

Results: Of 43 patients, 23 patients had a mitosis rate under 5/50, whereas 5 patients had a mitosis rate between 5/50 — 10/50, and 15 patients had a mitosis rate over 10/50. According to the size of the tumor, 3 patients had a single tumor under 2 cm. All of these three patients had lesions in the prepiloric area, and got operated with the symptoms of gastric outlet syndrome. 17 patients had a tumor between 2-5 cm, whereas 14 patients had a tumor between 5-10 cm. 9 patients had GIST tumors over 10 cm in diameter. Interestingly, all patients with liver metastasis had liver lesions over 10 cm. One patient with a tumor bigger than 10 cm had an extragastrointestinal stromal tumor, arising from the mesentery. The pathological results of the specimens were as follows: 29 spindle cell histologic subtype, 3 epitheloid cell subtype, and 11 mixed cell subtype. The focal necrosis was present in 14 patients. From 43 patients, three patients got reoperated. The first patient was reoperated at the fifth month postoperatively because of mechanical obstruction. The second patient got reoperated at the ninth month postoperatively because of incisional hernia. The third reoperated patient was reoperated because of the first pathological specimen was found out to be surgical borders millimetrically positive.

Conclusions: The reoperation rate for our patients in three years of follow up was 6.97%. All reoperated patients had a pathological finding of spindle-cell type of morphology, with mitosis rates over 10/50. There needs to be more studies based on reoperation rates after GIST surgeries, but this study evaluated that complications after GIST surgery should be followed both by the oncologist and the surgeon.

Legal entity responsible for the study: The authors.

Funding: Has not received any funding.

Disclosure: All authors have declared no conflicts of interest.

https://doi.org/10.1016/j.annonc.2021.05.305

P-252 Residual fibrosis after treatment with anti-epidermal growth factor receptor or bevacizumab in colorectal liver metastases and its correlation with survival: A retrospective pooled analysis

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Background: Pathologic response to preoperative chemotherapy for colorectal liver metastases (CLM) is associated with survival after hepatectomy. Rubbia-Brand L et al stablished a five pathological categories classification with prognostic value in this setting. In 2012, Poultsides GA et al concluded that fibrosis, not necrosis, is the predominant chemotherapy-related pathologic alteration driving prognostic information. Stremitzer S et al concluded, in 2015, that cetuximab induces more fibrosis than bevacizumab but did not find differences in overall survival.

Methods: The primary end-point of this study is to demonstrate that Epidermal Growth Factor Receptor (anti-EGFR) (cetuximab or panitumumab) associated to chemotherapy induces more fibrosis (>40%) than bevacizumab in patients with CLM before hepatectomy. Secondary endpoints are to evaluate differences in median overall survival (OS) between anti-EGFR and bevacizumab treatment before hepatectomy in patients with CLM and differences in OS between residual fibrosis degree (≥40% versus < 40%) after any type of treatment before hepatectomy. This is a retrospective study (N sample calculated=200 patients). The protocol was aproved by the research ethics committee in 2019. The Fisher exact test was used to compare 2x2 proportions and the Kaplan-Meier and Cox Regression Model was use to analyce and compare survival data. Statistical analysis was performed with SPSS package v20.0.

Results: We report the first interin analysis results after reviewing 42 patients. 9 patients (52.9%) in the anti-EGFR group showed fibrosis>40% compared to 3 patients (25%) in the bevacizumab group, Fisher exact test p=0.251. There were no differences in OS between the anti-EGFR group (OS=35 months, IC95 19.03-51.02) and bevacizumab group (OS=49 months, IC95 24.23-75.37), HR 1.32 (IC95 0.611-2.879). OS in the group with major residual fibrosis (≥ 40%) was better than minor residual fibrosis (< 40), 68.23 (IC95 33.83-102.62) versus 29.53 (IC95 18.19-40.86), but this was not statistically significant (HR 0.488, IC95 0.195-1.224, p=0.126).

Conclusions: Treatment with anti-EGFR before hepatectomy in CLM induces, not significantly, more residual fibrosis but it does not improve overall survival compared to bevacizumab. Fibrosis ≥ 40% seems to be a good prognostic factor independent of the previous treatment used before hepatectomy.

Legal entity responsible for the study: The author.

Funding: Has not received any funding.

Disclosure: All authors have declared no conflicts of interest.

https://doi.org/10.1016/j.annonc.2021.05.306

P-253 Detection of potential molecules that might be implicated in colorectal metastasis to lung

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Background: Colorectal cancer usually metastasizes to lung, liver or lymph nodes. The detection of markers that might be used as predictors of the metastasis, or might be implicated in metastasis, could be used as potential therapeutic targets, or biomarkers. In this study, we used a model combining the environment of colon cancer cells, and providing signals from normal lung cells, or endothelial cells to identify any potential biomarkers that probably associated with colorectal metastasis to lung. The model uses 3D cell culture techniques to simulate the in vivo system.

Methods: Human colorectal cancer cell lines, HCT-116 and HCT-15, were co-cultured with endothelial cells (HUVEC), or normal lung cells (BEAS-2B), in Matrigel and cells were grown as 3D cultures. RNA Isolated from both co-cultures as well as from initial cell populations and gene expression microarray experiments were performed. Data normalized according to initial cell populations, and genes whose expression altered under co-cultivation were selected for further studies. Gene expression was knocked-down with siRNA, and study of markers associated with metastasis followed.

Results: Different expression profile upon co-cultivation with lung cells, but not with endothelial cells, was observed in more than 150 genes. Among them, a few were associated with invasion, motility, epithelial to mesenchymal transition (EMT)-mesenchymal to epithelial transition (MET) and cell adhesion. siRNA experiments in ANGPT1, NEDD9 and FN1 led to a decrease in expression of genes and transcription factors, associated with metastasis and invasion (growth factor receptors, integrins, cytokeratins, etc.).

Conclusions: These preliminary data indicate that the genes ANGPT1, NEDD9 and FN1 might be associated with colorectal metastasis to lung. These genes overexpressed only upon co-cultivation with normal lung cells, but not with endothelial, and their downregulation was associated with downregulation of genes implicated in metastatic pathway. The above markers need to be evaluated also in clinical samples, so to be used as biomarkers or potential drug targets.

Legal entity responsible for the study: The authors.

Funding: Has not received any funding.

Disclosure: All authors have declared no conflicts of interest.

https://doi.org/10.1016/j.annonc.2021.05.307