longitudinal sections were made. The stain used for histology was Alcian&Alizarin.

**Results:** The development of long bones in vitamin C deficient guinea pigs are considerably stagnant. Hyaline cartilage models are significantly shortened. Ossification in the diaphyses of carpal and metacarpal bones are absent, and the organization of the epiphyseal plates is very irregular with the reduction of number of chondrocytes. Moreover, there are numerous haemorrhagic regions and subperichondrial bleeding with separation of perichondrium.

**Conclusion:** Deprivation of vitamin C during inrauterine period disables normal development of long bones. Disorder of hyaline cartilage models was seen, as well as the disorder of ossification.

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**PS060**

**Peculiarities of expression of apoptosis markers in the tissues of primary fallopian tubes carcinoma**

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**Aim:** immunohistochemical analysis of apoptosis markers in the tissue of PFTC.

**Introduction:** Primary fallopian tubes carcinoma is a rare case among oncological diseases of female genital organs, but the mortality rate is rather high. Nowadays, the prognostic factors of this neoplasia are not fully determined. The data on the p53 and bcl2 proteins expression and their use as prognostic factors in patients with malignant tumors of many locations are contradictory.

**Methods:** the study was conducted on 66 samples of fallopian tubes tumor tissue. To study the apoptosis peculiarities of tumor cells the mouse monoclonal antibodies for bcl-2 (clone 100/D5) and p53 (clone SP5) were used. Mathematic calculations were done using Microsoft Excel 2010 with AtteStat 12.0.5.

**Results:** The high expression of p53 was found in patients of all clinical stages. Mutations of p53 increased with spreading of the neoplastic process. Strong correlation of p53 presence in tumor samples and clinical stage of the disease was determined ($r=0.77$). In contrast to the abovementioned protein the study of bcl-2 showed the moderate negative correlation between this protein and the stage of the disease ($r=-0.54$). Analysis of the dependence of p53 expression with the presence or absence of lymph nodes metastasis showed a direct correlation between the indicators ($r=0.25$). Thus the level of p53 expression in patients with N1 was 80.6 ± 2.7% compared with the N0 group (29.7 ± 3.6%). The stage of neoplasia differentiation is in moderate direct correlation with p53 expression ($r=0.58$) and in inverse with $–$ bcl-2 ($r=-0.64$).

**Conclusion:** Expression of p53 depends on neoplasia spreading and stage of tumor differentiation. The expression of p53 is an independent prognostic marker for N-status and helps to classify the patients into “risk” groups.

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Impact of prior malignancies on the outcome of colorectal cancer: Revisiting clinical trial eligibility criteria

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Aim: To study the impact of prior malignancies on the survival of subsequent CRC.

Introduction: Colorectal cancer (CRC) is the third most common cancer in the US, 1–3 Some studies have correlated a prior history of malignancy with an increased incidence of CRC. Patients with history of cancer are generally excluded in clinical trials. This practice, not only affects clinical trials accrual, but also limits the potential therapeutic options for this population. The rationale behind this exclusion is that a history of malignancy could potentially interfere with the study outcomes.4 However, little is known about its real impact on survival of subsequent CRC.

Methods: We identified patients with CRC diagnosed between 1973 and 2008 using the National Cancer Institute’s SEER database.5,6 Outcomes of interest were overall survival and cause-specific survival of subsequent CRC in general, and specifically stage IV disease. Unadjusted Kaplan-Meier test and multivariable covariate-adjusted Cox models were used to assess the eligibility of enrollment of stage IV CRC patients in clinical trials.

Results: Overall, 550,325 patients with CRC were identified, of whom 31,663 patients had a prior malignancy. Both, history of prior non-leukemic malignancy and prior leukemia were associated with a worse overall survival (HR = 1.165 95% CI = 1.148–1.183, P < 0.001) and (HR = 1.825 95% CI = 1.691–1.970, P < 0.001), respectively. However, a history of any prior non-leukemic malignancy showed a favorable colorectal-specific survival (HR = .930 95% CI = .909–.952, P < 0.001). Analysis of stage IV CRC showed that a history of any prior non-leukemic malignancy was not associated with a significant difference in overall survival but having a history of leukemia showed a worse overall survival (HR = 1.535, 95% CI = 1.303–1.809, P < 0.001).

Conclusion: Clinical trials should take these results into consideration when including/excluding stage IV CRC patients with prior malignancies.

References

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PS071

Intervention of diabetes mellitus and metabolic risk factors in AMPK-PGC1α-SIRT3 pathway in the human corpus cavernosum

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Aim: To evaluate the potential clinical benefits of diabetes mellitus and metabolic risk factors in the human corpus cavernosum and their potential impact on the AMPK-PGC1α-SIRT3 pathway.

Introduction: Diabetes mellitus and metabolic risk factors play a significant role in the development of disorders affecting the human corpus cavernosum. However, the potential clinical benefits of these factors in the AMPK-PGC1α-SIRT3 pathway remain unclear.

Methods: We conducted a comprehensive review of the literature on diabetes mellitus and metabolic risk factors in the human corpus cavernosum, focusing on their impact on the AMPK-PGC1α-SIRT3 pathway.

Results: Our analysis revealed that diabetes mellitus and metabolic risk factors significantly impact the AMPK-PGC1α-SIRT3 pathway, potentially leading to improved erectile function and decreased risk of erectile dysfunction.

Conclusion: The potential clinical benefits of diabetes mellitus and metabolic risk factors in the human corpus cavernosum, particularly in the AMPK-PGC1α-SIRT3 pathway, warrant further investigation and clinical application.