The Association of Surgeons in Training Conference

Abstracts

ASIT MEDAL: 0311: OESTROGEN RECEPTORS AND OESOPHAGEAL CANCER: A POTENTIAL THERAPEUTIC PATHWAY
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Introduction: Oestrogen receptors (ER) have a well-established link in the initiation, progression and response to treatment of some cancers. Little is known, however, about the significance of ER as therapeutic biomarkers in oesophageal cancer (OC).
Methods: Effects of ER modulators on proliferation in OE33 and OE19 OC cells was evaluated. ERα and ERβ expression in paired normal and tumour oesophageal samples (n = 34) was performed using RT-qPCR. Correlation between ER mRNA expression and clinico-pathological features for OC was determined.
Results: There was a significant dose dependent inhibition of proliferation in OE33 and OE19 OC cells by a highly selective ERα antagonist (MPP) and an ERβ specific antagonist (PHTPP) (p < 0.05). RT-qPCR analysis revealed that ERα and ERβ mRNA expression was significantly higher (p < 0.05) in tumour tissues relative to their paired normal mucosa. Expression of ERα and ERβ in tumour samples correlated inversely with survival outcome (p < 0.05). Up-regulation of ERα correlated with higher pathological T stage (p < 0.05) and lymph node metastasis (p < 0.05), while ERβ up-regulation correlated with positive vascular invasion (p < 0.05).
Conclusions: Our findings indicate a role for ER in the biological behaviour of OC. Hence, the ER system may provide an additional novel target for the treatment of OC.

ASIT MEDAL: 0921: PROSPECTIVE STUDY TO ASSESS TUMOUR NECROSIS FACTOR ALPHA IN NON-INFLAMMATORY BOWEL DISEASE ENTEROCUTANEOUS FISTULA
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Aim: Tumour necrosis factor alpha (TNF-α) is elevated in inflammatory bowel disease enterocutaneous fistula (IBD ECF). No study has assessed the level in non-IBD ECF. The aim of this study was to assess the inflammatory activity, with a particular emphasis on TNF-α in non-IBD ECF when compared with control small bowel tissue.
Methods: Tissue biopsies were obtained from ECF at operation from non-IBD patients and from normal control patients. After overnight culture, intracellular staining was performed using monensin to assess on-going production of TNF-α. Data was acquired using FACS Canto II. Unpaired Student’s t-test was used to compare variables between groups.
Results: The on-going production of TNF-α from dendritic cells (p = 0.0007), putative monocyte and B cell populations (p = 0.04) and CD3+ T cells (p = 0.04) was significantly higher than that from control tissue.