The median patient age was 60 years, median of tumor thickness 2.3 mm and median of Clark's level of penetration 3. Positive lymph nodes were shown in 48% of cases. All markers were expressed at higher values in melanoma cells than in surrounding tissue. MMP2 was more prominent in the zone with strong lymphocyte infiltration (P=0.018) and deeper layers of tumor penetration. MMP2 exhibited stronger correlation with laminin (P=0.035), while MMP9 correlated with galectin-3 expression (P<0.001). Laminin and galectin-3 were coexpressed in melanoma cells (P=0.044). Although not significant, decreased expression of both markers was found in cases with positive lymph nodes. The study pinpointed the possible markers of melanoma progression. A higher MMP2 expression was found in deeper layers of tumor penetration. However, additional studies in a larger cohort and other histologic melanoma types are necessary to reach more precise conclusions.

## TUBULOCYSTIC CARCINOMA OF THE KIDNEY

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Tubulocystic carcinoma, in the past also known by the terms Bellini epithelioma and low grade collecting duct carcinoma, is a subtype of renal cell carcinoma, not classified in the 2004 WHO classification. It has a distinctive histology, composed of variably sized tubules and cysts surrounded by fibrotic stroma. Recent studies of tubulocystic carcinoma showed it to have a strong male predominance and low but definitive metastatic potential. A 71-year-old man with unspecific abdominal pain underwent ultrasonography and computed tomography studies, which revealed a tumorous mass of the kidney. Nephrectomy with ureteretomy was performed and materials were referred for histopathologic analysis. The tumor measured up to 4.5 cm and was partly cystic with areas of hemorrhage and necrosis. Microscopically, it was composed of irregular cysts and tubules lined with single layer of cuboidal to flat epithelial cells with abundant eosinophilic cytoplasm and large nuclei with prominent nucleoli. Immunohistochemically, tumor cells were diffusely positive for CK7. Histopathologic report corresponded to unclassified renal cell carcinoma , nuclear grade 3 according to WHO classification, and to tubulocystic carcinoma according to recent literature. Tubulocystic carcinoma is an uncommon tumor with 55 cases reported in the literature. In the Ljudevit Jurak University Department of Pathology archive, two cases of this tumor were diagnosed in the last five years. It is important to recognize this rare subtype of renal carcinoma, although appearing relatively bland, tubulocystic carcinoma can behave aggressively.

## ESTROGEN RECEPTOR POSITIVE CELLS IN GASTRIC AND DUODENAL ULCER: A PILOT STUDY

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It is known that gastric and duodenal peptic ulcer is more common in males. Estrogen has an anti-inflammatory effect, acts on prostaglandin E2 induced mastocyte degranulation and release of vascular endothelial growth factor (VEGF), and also has a role in experimental model of wound healing by converting fibroblasts into myofibroblasts. It also has a sexspecific protective effect in gastroduodenal ulcer. The aim of the present study was to investigate the expression of estrogen receptors alpha (ER $\alpha$ ) in gastric and duodenal ulcer tissue in order to elucidate the observed sex difference in the incidence and impairment process of this disease. Twelve surgical specimens of gastric and duodenal ulcer biopsies were found in the database of the Ljudevit Jurak University Department of Pathology, Sestre milosrdnice University Hospital Center, during the 2000-2010 period. There were six male (aged 30-74 years) and six female (aged 50-81 years) patients. Paraffin embedded gastric and duodenal ulcer tissue was cut on microtome and analyzed on routine stained sections and immunohistochemically with ERa monoclonal antibody. Estrogen receptor positive cells were found in nine of twelve biopsies.  $ER\alpha$  positive cells were neutrophils and fibroblasts in the zone of detritus, while  $ER\alpha$  positive mastocytes were found in the zone of granulation tissue and fi-