What's New (Jan–June 2012)

**ONCOLOGY**

Elevated blood pressure linked to increased risk of cancer

Scientists from Sweden, Austria, Norway, Germany and London using data present in the Metabolic Syndrome and Cancer Project database— a repository of information collected as part of health examinations between 1972–2005, have found that elevated mid-blood pressure [(systolic BP+diastolic BP)/2] was associated with a significantly higher overall risk of cancer in men (hazard ratio [HR] 1.07 per 10 mm Hg increase in mid-blood pressure, 95% CI 1.04–1.09) but not in women. Nearly 578,000 individuals were included in this cohort with the number of men and women roughly equal (50.1% men and 49.9% women). In men, the risk of a malignancy in the digestive tract (oropharynx, colon, rectum and anus) lungs, genitourinary tract (bladder and kidney) and skin (melanoma and non-melanomatous skin cancer) were significantly increased. While the overall risk of cancer was not significantly affected in women, the risk of malignancy at specific sites, notably the pancreas, liver, body of the uterus, cervix and skin (malignant melanoma) was significantly elevated in females (Stocks et al., 2012).

**Treatment of H. pylori infection reduces the incidence of gastric cancer**

A 14.7 year follow-up study investigating the effect of *Heliobacter pylori*, garlic and vitamin treatment on the incidence of gastric cancer among 3,365 patients in China revealed that garlic and vitamin treatment were associated with a non-significant reduction in the incidence of gastric cancer (Odds ratio 0.83, 95% CI 0.56–1.23 and 0.85, 95% CI 0.57–1.26 respectively). Treatment of *H. pylori* infection was associated with a significant reduction in the incidence of gastric cancer (Odds ratio 0.61, 95% CI 0.39–0.96). Neither garlic or vitamin supplementation nor *H. pylori* treatment caused a significant reduction in mortality from gastric cancer (Ma et al., 2012).

Mass spectrometry identifies proteins differentially expressed in gastric adenocarcinoma

A study employing paired gastric adenocarcinoma and adjacent normal gastric tissue from 32 patients subjected to proteomic analysis by 2-D electrophoresis followed by Mass spectrometry found that 19 proteins are differentially overexpressed in gastric cancer tissues while 11 were underexpressed compared to adjacent normal stomach tissue. SEPT2, UBE2N, TALDO1 were overexpressed while GKN1, MRPL12, PACAP and GSTM3 were underexpressed in gastric cancer tissues (Kocevar et al., 2012).

**GASTROENTEROLOGY**

Rituximab as a novel treatment for IgG4 related disease

Immunoglobulin G4 related disease (IgG4-RD) refers to a syndrome affecting multiple organs and characterized by elevation of serum IgG4 levels and a fibro-inflammatory reaction (lymphoplasmacytic infiltrate, obliterative phlebitis and tissue eosinophilia). Among the organs involved by this disease are the pancreas and biliary tract. In a recent study, ten patients with IgG4-RD were treated with two doses of intravenous rituximab separated by 15 days. Nine (90%) patients had a significant clinical improvement within 1 month of starting rituximab therapy. Two patients who experienced a flare up of the disease characterized by an
increase in B cells were treated successfully with a repeat course of Rituximab (Khosroshahi et al., 2012).

**IPMN emerges as a novel risk factor for Post-ERCP pancreatitis**

Acute pancreatitis is a complication following endoscopic retrograde cholangiopancreatography (ERCP). Prophylactic stenting of the pancreatic duct has been used to decrease the frequency of post-ERCP pancreatitis. In a study involving 414 patients who had undergone prophylactic pancreatic duct stenting during ERCP, intraductal papillary mucinous neoplasm (IPMN) was the only significant risk factor for development of post-ERCP pancreatitis (odds ratio 2.9, 95% CI 1.2–7.1). Patients with IPMN who developed post ERCP pancreatitis had a significantly smaller pancreatic duct diameter (3.1±1 mm) than those who did not develop this complication (4.7±2.6 mm) (Ito et al., 2011).

**Endoscopy for a gastrointestinal (GI) bleed within 30 days after Myocardial infarction (MI) is associated with significant risk of complications**

Patients who have had an MI are generally started on anti-platelet agents and hence are at a greater risk for a GI bleed. A Canadian study investigated the incidence of complications in this group of patients. Of 44 patients who met the inclusion criteria (ST or non-ST elevation MI, GI bleeding and endoscopy within 30 days of MI), complications were noted in more than 25% of procedures. The most common complications were acute coronary syndrome (n=7), arrhythmia (n=1), respiratory failure (n=1), aspiration pneumonia (n=1) and perforation (n=1). Most patients had other co-morbidities like diabetes, hypertension, heart failure, stroke, lung disease and a previous MI. Neither age, the level of hemoglobin nor the timing of endoscopy were significant independent predictors of a complication in these patients (Al-Ebrahim et al., 2012).

**REFERENCES**


