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In Vitro Growth Suppression of Renal Carcinoma Cells by Curcumin

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and subsequent PCI to determine if there is increased risk of stent thrombosis in specific post-CABG coronary artery territories and if these altered overall cardiovascular outcomes.

Methods: A retrospective review of our database on all patients presenting with stent thrombosis over the last 5 years was performed. Patients were included based on the accepted Academic Research Consortium definition of stent thrombosis.

Results: From January 2009 to February 2014, 220 patients were found to have had a stent thrombosis. Of these, 110 (50.0%) had left anterior descending (LAD) artery lesions, 82 (37.3%) had right coronary artery (RCA) lesions and 26 (11.8%) had a stent thrombosis in the left circumflex artery (LCx). Prevalences of traditional risk factors were essentially equivalent regardless of which coronary artery developed stent thrombosis. All patients were on dual antiplatelet prior to developing stent thrombosis. Further analysis revealed 38 (17.3%) had a prior history of CABG. A significant difference among the location of stent thrombosis and the history of CABG ($P=0.043$) was seen; 30.8% ($n=8$) of patients with LCx stent thrombosis had prior CABG compared to 10.9% ($n=12$) and 22% ($n=18$) with LAD and RCA stent thrombosis, respectively.

Conclusion: In a large cohort of patients with stent thrombosis, LAD and RCA lesions were predominant, with LAD lesions representing half of all stent thromboses. PCI of these coronary territories thus infers a higher risk of stent thrombosis even in the presence of optimal medical therapy. Once stent thrombosis occurs, no significant difference in outcomes is seen based on location of the lesion alone. Additionally, patients who had prior CABG were significantly more likely to have stent thrombosis in the LCx and less likely in the LAD. This could be due to the fact that the left internal mammary artery graft is more often patent than vein grafts, which are more often anastomosed to the LCx and RCA and are at higher risk of needing stent placement after CABG.

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Background: Malignant clear cell renal carcinoma (ccRCC) is an aggressive tumor that is highly resistant to chemotherapy and radiation. Current therapeutic approaches to management of ccRCC have not significantly improved patient survival, therefore novel therapies are needed. The von Hippel-Lindau tumor suppressor gene is frequently mutated in ccRCC resulting in unregulated transcriptional activity of hypoxia-inducible factors (HIF) 1 α and 2 α . HIF-mediated transcription leads to increased growth factor

expression and growth factor receptor (GFR)-mediated signaling. NF κ B and STAT3 are phosphorylated in response to GFR activation and modulate gene expression, which promotes cell growth and invasion. Activated NF κ B and STAT3 expression is associated with ccRCC pathogenesis.

Purpose: The dietary polyphenol curcumin is a well-documented antitumor agent and a known inhibitor of NF κ B and STAT3 activation. Given the lack of effective therapies that block ccRCC progression, our objective was to examine whether curcumin could suppress the growth and migration of ccRCC cells, and whether this suppression was mediated via inhibition of NF κ B and STAT3 activity.

Methods: Human ccRCC cell lines (769-p, 786-o, Caki-1, ACHN and A-498 cells) were exposed to curcumin to assess the impact of curcumin on ccRCC cell viability. To examine the mechanism by which curcumin induced cell death, we used 769-p cells, a highly aggressive human ccRCC cell line that does not express functional von Hippel-Lindau protein. The impact of curcumin on the phosphorylation status and transcriptional activity of NF κ B and STAT3, in 769-p cells, was determined.

Results: Our results show that in ccRCC cells curcumin decreased cell proliferation and cell viability, abolished clonogenic property, induced apoptosis and blocked cellular migration. The growth suppressive and proapoptotic effects of curcumin were accompanied by decreased phosphorylation and transcriptional activity of NF κ B and STAT3.

Conclusion: The ability of curcumin to induce apoptosis and inhibit migration of ccRCC cells justifies additional studies that explore the potential of developing curcumin or other NF κ B and STAT3 inhibitors as novel therapeutic agents in the management of ccRCC.

Triple Aim for Clinical Teachers (TACT): Faculty Physician Perceptions on Their Ability to Balance Clinical Quality, Trainee Learning, and Teaching Efficiency

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Background: A common challenge facing teaching physicians is balancing high-quality student and resident teaching with efficient, high-quality care and patient service. Publicly accessible clinic performance reports increasingly affect where patients seek care and demand that teaching clinics rise to consumer expectations while training future physicians to function in the modern health care workplace. Limited information is available to guide physicians to achieve the triple aim for clinical teachers (TACT): clinical quality/patient experience, trainee learning, and teaching efficiency.

Purpose: To understand clinical teachers' TACT-related