Chemosaturation: A novel frontier for liver directed therapy

After the lymph system, the liver is the primary site for metastatic disease regardless of origin. Importantly, progression of primary and metastatic liver disease is a major determinant both of quality of life and overall survival in these patients. There are numerous locoregional therapies, ranging from ablative techniques, embolization based techniques and infusional therapies. Chemosaturation using the Percutaneous Hepatic Perfusion technique (CS-PHP) offers a truly novel approach to the treatment of diffuse hepatic neoplastic disease. In this therapy, a high dose chemotherapeutic agent is administered via the Hepatic artery, and then the non-absorbed agent is filtered from the blood stream via an extracorporeal circuit before it is returned to the patient. This technique allows for very high dose delivery of cytotoxic agents to the liver parenchyma while protecting the systemic tissues from toxic exposure. The results from the Phase III clinical trial which evaluated CS-PHP for the treatment of metastatic ocular melanoma will be presented, as well as future directions for this exciting therapy.