A Dynamic Duo of Eponymous Lectures – A Visit by Dr Jay Hoofnagle

Dr Jay Hoofnagle, Director of the Liver Disease Research Branch in the Division of Digestive Diseases and Nutrition of the National Institute of Diabetes and Digestive and Kidney Diseases (NIDDK) of the National Institutes of Health (NIH) in Bethesda, Maryland, USA was the 2019 Solly Marks Visiting Professor. He visited the Groote Schuur Hospital/University of Cape Town Divisions of Gastroenterology and Hepatology from 12-19 August 2019.

His programme included joining the Liver Clinic, GIT and Liver academic rounds as well as the histology meetings and interacting with consultants, GIT Fellows and medical registrars.

The Solly Marks Lecture was on “New challenges in Drug-induced Liver Injury”. Drug-induced liver injury (DILI) is an important disease entity as it is the most common cause of acute liver failure and a common reason for FDA non-approval or withdrawal of an agent from clinical use. 3-5% of hospital admissions for jaundice are due to DILI and it is a major reason for a liver consultation. This is very relevant to South Africa where many admissions in the setting of HIV are due to Efavirenz or Tuberculous drug-induced liver injuries which are associated with significant morbidity and mortality. Globally, antimicrobials are the most common causes of DILI with amoxicillin/clavulanic acid being the main culprit, but increasingly herbal and dietary supplements are causes of DILI.

Dr Hoofnagle is the Senior and Founding Editor of the LIVERTOX® website on drug-induced liver injury. This website provides up-to-date, accurate, and easily accessed information on the diagnosis, cause, frequency, patterns, and management of liver injury attributable to prescription and non-prescription medications, including herbals and dietary supplements. In addition to staff and students, this eponymous lecture was attended by a number of notable guests including Professor Solly Marks’ daughter, Mrs Karen Tollman, previous Heads of Departments of Medicine and Surgery, donors of the Gastroenterology Department, and members of the SAGES Council. By all accounts it was very well received.

Dr Hoofnagle also gave the Professor Michael Kew Eponymous Lecture entitled “Hepatitis B, 50 years on” at SAGES. Despite effective vaccination and antiviral therapy, Hepatitis B remains endemic in South Africa with a prevalence of 6.7%. The lecture covered the Hepatitis B lifecycle, phases of chronic infection, pathophysiology and treatment. He discussed
indications for treatment, duration of treatment and the potential to stop antivirals using new virologic markers of HBV replication such as serum HBV RNA and HB core Ag as predictors of HBsAg loss. Serum HBV RNA and HB core Ag are present in moderate titres in patients with high titres of HBV DNA and may persist despite marked HBV DNA suppression during nucleoside therapy. Their presence demonstrates the persistence of HBV cccDNA and production of the HBV pre-genome and predicts loss of HBsAg if the titres decrease and therefore the potential to consider stopping therapy. At present, a number of curative therapies targeting the immune system, viral replication and cccDNA are being investigated; these include Myrcludex B (a HBV entry inhibitor, targeting the sodium taurocholate receptor), HBV capsid assembly modulators, inhibitors of protein translation by siRNA, silencing of cccDNA, HBV core Ag inhibitors, polymerase inhibitors, HBsAg release inhibitors and immunomodulators. Future therapeutic directions will probably require combination therapy for the promise of a cure for HBV infection.

We are grateful to the Department of Medicine and The Gastroenterology Foundation of South Africa for supporting Dr Jay Hoofnagle’s visit as the 2019 Solly Marks Visiting Professor.

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