In this September 2009 issue of Clinics we highlight a study by Meneghini et al. on the effect of Memantine, a N-methyl-d-aspartate (NMDA) glutamate receptor antagonist used to treat Alzheimer’s disease on cardiomyocytes. They found that the reduction of nuclear size of rats exposed to a cold stress is effectively prevented by simultaneous treatment with memantine. We publish nine papers on Clinical Science and three other reports on non clinical research.

Bueno et al. evaluated the reasons for resubmitting research projects to the Research Ethics Committee of a University Hospital in São Paulo Brazil, and found that the main reasons for returning the projects to the researchers were the use of inadequate language and/or difficulty understanding the informed consent form, lack of information about the protocol in the informed consent form, as well as doubts regarding methodological and statistical issues of the protocol. Other reasons involved lack of accuracy or incomplete documentation, need for clarification, approval for participation of external entities, and lack of information on financial support.

Bittencourt et al. evaluated HFE and non-HFE gene mutations in Brazilian patients with hereditary hemochromatosis and found that one-third of Brazilian subjects with the classical phenotype of HH do not carry HFE or other mutations that are currently associated with the disease in Caucasians. This observation suggests a role for other yet unknown mutations in the aforementioned genes or in other genes involved in iron homeostasis in the pathogenesis of hereditary hemochromatosis in Brazil.

Kamulegeya et al. investigated the epidemiological characteristics of maxillofacial fractures and associated fractures in 132 patients seen in the Oral Surgery Unit of Mulago Hospital, Kampala, Uganda through a six-month prospective study, which included socio-demographic factors, type and etiology of injury, additional fractures, and post-surgery complications and recommend that anticipated changes in maxillofacial trauma trends necessitate regular epidemiologic studies of facial fractures to allow for development and implementation of timely novel preventive measures.

Brandão et al. followed 53 patients with medullar thyroid carcinoma, a neoplasia of intermediate prognosis and differentiation, which does not always respond predictably to known treatments. They found that clinical and pathological aspects of surgically treated patients are predictors of disease progression. Specifically, even treated cervical lymph node metastases are significantly correlated with disease progression.

Carvalho et al. evaluated crack cocaine use practices, risk behaviors associated with HIV infection among drug users, and their involvement with violence in 350 drug users attending drug abuse treatment clinics in São Paulo, Brazil. A high HIV prevalence and associated risky sexual behaviors were observed among crack cocaine users. The society and the authorities that deal with violence related to crack users and drug trafficking should be aware of these problems.

Campos et al. endeavored to identify factors associated with increased levels of self-reported quality of life among HIV-infected patients after four months of antiretroviral therapy. Patients were recruited at two public health referral centers for AIDS in the city of Belo Horizonte, Brazil, for a prospective adherence study. Authors highlight the importance of modifiable factors such as psychiatric symptoms and treatment-related variables that may contribute to a better quality of life among patients initiating treatment. Considering that poor quality of life is related to non-adherence to antiretroviral therapy, careful clinical monitoring of these factors may contribute to ensuring the long-term effectiveness of antiretroviral regimens.

Meyer et al. evaluated, by means of the Inflammatory Bowel Disease Questionnaire the quality of life of 36 ulcerative colitis patients submitted to proctocolectomy with sphincter preservation using J-pouch reconstruction over ten years ago. They concluded that the possibility of sphincter
preservation should always be taken into account, since patients remain clinically stable and have a high quality of life even after long periods.

Miot et al. estimated oculometric parameters of 15 cases of Graves’ ophthalmopathy in comparison to 12 healthy eyes using digital photography and digital image analysis. This comparative analysis suggests that eye proptosis is related to an asymmetric increase in lateral oculometric measures, and that standardized digital photographs can be used in clinical practice to objectively estimate oculometric parameters of Graves’ ophthalmopathy patients.

Vaz et al. sought to identify the participation of the coagulation system in the differential diagnosis of pleural effusions through the laboratory profile of coagulation and fibrinolysis in 54 pleural fluids (15 transudates and 39 exudates). The coagulation system was found to play an important role in the development of pleural diseases. Coagulation tests show differences between transudates and exudates but not among exudate subgroups. Understanding the pathophysiological mechanisms of pleural disorders may help to define new diagnostic and therapeutic approaches.

Pai et al. studied 98 pelvic halves of embalmed cadavers, in which the origin and course of the obturator artery were traced and noted. The data obtained in this study show that it is more common to find an abnormal obturator artery than was reported previously, and this observation has implications for pelvic surgeons and is of academic interest to anatomists. Surgeons dealing with direct, indirect, femoral, or obturator hernias need to be aware of these variations and their close proximity to the femoral ring.

Cardoso et al. identified the scientific production of tenured faculty from the Universidade de São Paulo, Faculdade de Medicina performed from 2001 to 2006, and that it is possible to analyze this by the number of papers published by full professors, taking into account not only their academic position and influence, but also the fact that publication is an opportunity to stimulate joint projects with other members of the same institution.

Zanoni et al. investigated mesenteric microcirculatory dysfunctions, bacterial translocation phenomenon, and hemodynamic/metabolic disturbances in a rat model of intestinal obstruction and ischemia. They found that Intestinal obstruction and ischemia in rats is a relevant model for the in vivo study of mesenteric microcirculatory dysfunction and the occurrence of bacterial translocation. This model parallels the events implicated in multiple organ dysfunction (MOD) and death.

We also publish 3 case reports