In this issue of CLINICS we highlight a study by Lima et al. on the relation of delirium to post-discharge mortality and various other measured parameters, as observed prospectively in 199 hospitalized patients, aged 60 years or more. A highly significant correlation was found between the occurrence of delirium and mortality over a 2 year follow up period, as shown in Figure 1.

However, according to a multivariate analysis, delirium was not an independent predictor of post-discharge mortality. Other predictors were age ≥ 80 years (p = 0.029), albumin concentration < 3.5 g/dl (p = 0.001), and immobility (p = 0.007).

Apart from this study, CLINICS publishes six other clinical studies as well as four reports on basic research.

Figure 1. Delirium in hospitalized elderly patients predicts post-discharge mortality (See Lima et al. in this issue of Clinics)

Camanho et al. retrospectively analyzed the incidence, clinical significance, and clinical manifestations of pathological synovial plicae of the knee in 63 patients, of whom 21 had the diagnosis confirmation by previously performed MRI. Of these, 55 improved with conservative treatment, 6 of whom exhibited a recurrence of symptoms. The other eight patients underwent arthroscopic removal of the synovial plica. Authors conclude that a synovial plica of the knee is a clinical entity that should be borne in mind and should be considered as a potential diagnosis in patients with knee pain.

Anger et al. evaluated the clinical, epidemiological and demographic aspects of primary cutaneous melanoma, and correlated them with patient prognosis for 84 patients treated between 1990 and 2007. They found that incidence was higher in areas of sun exposure, with trunk lesions in males, and lower limb lesions in females. Breslow’s thickness and ulceration, the mitotic rate per mm² correlated with worse patient outcome. The sum of ulceration (0 or 1), Breslow index (1 to 3) and mitotic index (0 or 1) allowed the establishment of a prognostic score: if this sum was equal to or over three, nearly all (91.7%) patients had systemic disease. The overall 5-year survival rate was approximately seventy percent.

Pesaro et al. investigated 1401 patients with acute myocardial infarction and evaluated the occurrence or the absence of atrial fibrillation, the use of oral β-blockers and mortality during the first 24 hours. They found that the use of β-blockers was inversely correlated with the presence of atrial fibrillation. The presence of atrial fibrillation was found to be independently correlated with mortality, whereas the use of β-blockers was inversely and independently correlated with mortality.

Nery et al. endeavored to describe blood pressure responses during resistance exercise in 10 hypertensive and 10 normotensive subjects to determine whether an exercise protocol alters these responses. They found that compared with normotensive subjects, hypertensive patients displayed greater increases in systolic blood pressure during exercise; in two exercise protocols, systolic blood pressure returned to
baseline during the rest periods between sets in the normotensive group; however, in hypertensive patients, blood pressure remained slightly elevated. During rest periods, diastolic blood pressure returned to baseline in hypertensive patients, but dropped below baseline in normal subjects.

**Cabrita et al.** describe a new technique for removing the distal fragments of broken intramedullary femoral nails without disturbing the nonunion site. The technique involves the application of a distractor prior to the removal of the nail fragments, with subsequent removal of the proximal nail fragment in an anterograde fashion and removal of the distal fragment through a medial parapatellar approach. Impaction of the fracture site is then performed with a nail that is broader than the remaining fragmented material. Nails were removed from five patients using this technique without any complications. After a mean follow-up period of 61.8 months, none of these patients showed worsened knee osteoarthritis. Authors claim that this new technique allows the removal of the distal fragment of fractured femoral intramedullary nails without opening the nonunion focus or using special surgical instruments.

**Koksal and Kurban** investigated the effects of pneumoperitoneum induced for laparoscopic cholecystectomy (Group 1) on oxidative stress markers, including paraoxonase, arylesterase, total oxidant status, and total antioxidant status. Results were compared to those obtained from patients that underwent surgical procedures for an abdominal wall hernia under general anesthesia (Group 2). The differences in leukocyte counts and neutrophile rates were not significant between the two groups. In Group 1, no significant differences in the total oxidant and antioxidant status levels were identified; however, paraoxonase and arylesterase levels were lower on postoperative day 1. No significant changes were observed in the total oxidant status, total antioxidant status, and paraoxonase or arylesterase activities in Group 2. The perioperative total antioxidant status and arylesterase level were higher in Group 1 in comparison to Group 2. They conclude that paraoxonase and arylesterase levels are useful markers in the evaluation of oxidative stress caused by intra-abdominal pressure due to pneumoperitoneum.

**Ferreira et al.** evaluated the effects of electrical countershock on lipid depletion in the adrenal gland and on glycogen depletion in the liver using male Wistar rats and compared such effects to untreated controls and to cold stressed animals. They found that rats exposed to the cold stress presented the highest glycogen and lipid depletion in the liver and the adrenal gland, respectively. Electrical countershock significantly increased lipid depletion in the adrenal gland and glycogen depletion in the liver. One week after the electrical countershock, the liver and adrenal gland profiles were similar to those of the control group.

**Bitar et al.** histologically analyzed allografts from cadaveric semitendinous muscle after cryopreservation at -80°C in comparison to a control group kept at only -4°C to test the hypothesis that the histological characteristics of the tissue are maintained when the tendons are kept at lower temperatures, and found no differences between the fresh and frozen samples in relation to seven variables. They conclude that semitendinous muscle tendon allografts can be submitted to cryopreservation at -80°C without suffering histological modifications.

**Miura et al.** endeavored to develop an experimental malignant astrocytoma model with the characteristics of the human tumor using primary cells from subcutaneous xenograft tumors produced with malignant astrocytoma U87MG cells inoculated intracerebrally into immunosuppressed Rowett rats and found that injected animals developed non-infiltrative tumors, although other glioblastoma characteristics, such as necrosis, pseudopalisading cells and intense mitotic activity, were also observed. They conclude that a malignant astrocytoma intracerebral xenograft model with poorly invasive behavior was achieved.

**Meirelles et al.** evaluated the protective effects of N-acetyl cysteine on the pancreas and kidney after pancreatic ischemia reperfusion injury in a Wistar rat model and conclude that their study provides evidence that N-acetyl cysteine has a beneficial effect on pancreatic ischemia reperfusion injury and renal function in this model.

We also publish two review articles, by **Cardoso et al.** on acute and chronic effects of aerobic and resistance exercise on ambulatory blood pressure, and by **Liphaus and Kiss**, on the role of apoptosis proteins and complement components in the etiopathogenesis of systemic lupus erythematosus.

We also publish three case reports and two technical notes.