## **Urological Survey**

superficial bladder cancer, the finding of focal nodularity in the bladder wall is very difficult to differentiate from bladder cancer and bladder biopsy or surgical pathology is necessary. Similarly, transrectal biopsy of the prostate is mandatory to exclude prostate cancer in these patients.

Dr. Adilson Prando

Chief, Department of Radiology and Diagnostic Imaging, Vera Cruz Hospital Campinas, São Paulo, Brazil E-mail: adilson.prando@gmail.com

## UROGENITAL TRAUMA

## Impact of obesity in damage control laparotomy patients

Duchesne JC, Schmieg RE Jr, Simmons JD, Islam T, McGinness CL, McSwain NE Jr Section of Trauma and Critical Care Surgery, Department of Surgery and Anesthesia, Tulane University School of Medicine, New Orleans, Louisiana, USA J Trauma. 2009; 67: 108-12

Background: Obesity is an independent predictor of increased morbidity and mortality in critically injured trauma patients. We hypothesized that obese patients in need of damage control laparotomy (DCL) will encounter an increase incidence of postsurgical complications with a concomitant increase mortality when compared with a cohort of nonobese patients.

Methods: All adult trauma patients who underwent DCL during a 4-year period at a Level I Trauma Center were retrospectively reviewed. Patients were categorized into nonobese (body mass index [BMI] < or = 29 kg/m), obese (BMI 30-39 kg/m), and severely obese (BMI > or = 40 kg/m) groups. Outcome measures included the occurrence of postoperative infectious complications, failure of primary abdominal wall fascial closure, acute respiratory distress syndrome, acute renal insufficiency, multiple system organ failure, days of ventilator support, hospital length of stay, and death.

Results: During a 4-year period, 12,759 adult trauma patients were admitted to our Level I Trauma Center of which 1,812 (14.2%) underwent emergent laparotomy. Of these, 104 (5.7%) were treated with DCL: nonobese, n = 51 (49%); obese, n = 38 (37%); and severely obese, n = 15 (14%). In a multivariate adjusted model, multiple system organ failure was 1.82 times more likely in severely obese (95% CI: 1.14-2.90) and 1.74 times more likely in the obese patients (95% CI: 1.14-2.66) when compared with patients with normal BMI after DCL (p < 0.01). In the severely obese patients undergoing DCL, significantly elevated prevalence ratios (PR) for development of postoperative infectious complications, acute renal insufficiency, and failure of primary abdominal wall fascial closure were 1.75, 3.07, and 2.62, respectively. Days of ventilator support, length of stay, and mortality rates were significantly higher in severely obese patients (24 days, 27 days, and 60%) compared with obese (14 days, 14 days, and 21%) and nonobese (9.8 days, 14 days, and 28%) patients.

Conclusion: Severe obesity was significantly associated with adverse outcomes and increased resource utilization in trauma patients treated with DCL. Measures to improve outcomes in this vulnerable patient population must be directed at multiple levels of health care.