Ang1-TURP Syndrome: a complication that can occur despite precautions

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Introduction:
The TURP (transurethral resection of the prostate) syndrome is the most serious complication of transurethral resection of the prostate, it can be fatal. The incidence of TURP syndrome is decreasing, especially because of observance of requirements relating to the use of glycine, and utilization of technologic advances (laser techniques and bipolar circuitry).
We report the case of a patient who presented a severe TURP syndrome following glycine irrigation despite the observance of all precautions of use.

Case report:
A 72-year-old man, followed for arterial hypertension under amlodipine, proposed for TURP for Benign prostatic hyperplasia revealed by lower urinary tract symptoms, and which the size of prostate is sonographically estimated 40 grams. The preanesthetic assessment has shown a patient with a good physical activity (more than 4 MET) and echocardiography, an abnormal relaxation pattern related to age and hypertension. Biological tests were correct, in particular Hb = 12.4 g/dL and natremia = 138 mEq/L. The procedure was performed under spinal anesthesia and consisted on a monopolar TURP. Irrigation of bladder made with a total of 6 L of 1.5% glycine with 1% ethanol at a pressure of up to 60 cm water. 35 minutes after the beginning of the procedure when the surgeon finalizing hemostasis, the patient became slightly disoriented, so the TURP syndrome was suspected, surgeon advised and irrigation stopped. Despite stopping of irrigation of glycine, evolution was marked by rapid clinical deterioration, with apparition in few minutes of a respiratory distress with crepitations on auscultation, hemodynamic instability (bradycardia, hypotension 70/40 mmHg) and then quickly occurrence of partial seizures of left upper limb. After this the patient was put under mechanical ventilation, correction of hyponatremia started by saline serum 3.3% and an internal jugular catheter was placed. Initial biological assessment showed :

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\begin{align*}
\text{pH} &= 7.31 \\
\text{PCO}_2 &= 46.4 \text{ mmHg} \\
\text{PO}_2 &= 52.1 \text{ mmHg} \\
\text{HCO}_3^- &= 23.5 \text{ mmol} \\
\text{Na}^+ &= 108.3 \text{ mmol/l} \\
\text{K}^+ &= 5.47 \text{ mmol/l}
\end{align*}
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After restoration of effective circulation, furosemide was given and the patient was transferred to surgical intensive care unit. The sedation was stopped and 2 hours later, extubation done in a patient respiratory and hemodynamically stable, persistent slightly confused. The hyponatraemia was slowly corrected to 132 mmol/l and the patient discharged day 3 from ICU with a good recovery especially neurological.

Commentaries:
In this clinical observation, the patient has presented a life threatening TURP syndrome, despite the small prostate size, the not elevated irrigation pressure and the short duration of resection. That illustrates how regional anesthesia is superior than general anesthesia, by allowing an early detection of any change in mental status, enabling an early recognition of the syndrome and avoiding thereby its expression by an intraoperative cardiac arrest. Under general anesthesia, the diagnosis of TURP Syndrome is difficult, generally delayed and the cardiovascular signs are prominent.
Ang2-Perioperative Management in Patients Undergoing Cephalic Pancreaticoduodenectomy

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Introduction:
Cephalic Pancreaticoduodenectomy (CPD) represents one of the most important and complex surgical digestive procedure. This surgery remains the gold standard and the only potentially curative option for pancreatic cancer with high rate of perioperative morbi-mortality. So the anesthesiologist has a crucial role in the management of these patients. This unicentric study aimed, in our setting, to evaluate and assess perioperative management of patients and determine its influence on perioperative morbidity, complications occurrence and 30-day postoperative mortality.

Patients and Methods:
From January 2005 to December 2010, a total of 25 patients, who underwent cephalic pancreaticoduodenectomy in Mohammed VI’s University-Hospital of Marrakech, were enrolled retrospectively in the current study. The Patients were assigned to receive a standardized anaesthesic protocol: combined Thoracic Epidural Analgesia (TEA) and general anaesthesia followed by postoperative TEA for pain control, using a mixture of 0.125% bupivacaine and sufentanil. The epidemiological, clinical, histological and evolutive data were recorded and analyzed.

Results:
Mean patient age was 58.2 years. More than half of individuals were operated between 50 and 60 years of age. Most patients were men (sex-ratio=1.6). All cases had no preoperative medical comorbidities. CPD was performed for a pancreatic adenocarcinoma in 70% of cases and for periamppullary adenocarcinoma in 30%. The nutritional status was classified II in 80% of cases according to the Nutritional Risk Index. 91% of our patients presented a biological cholestasis. We found a 324 mL as an average of intraoperative blood loss and the mean of surgery duration was 340 min. The 30-day mortality was 12% (three fatal septic shocks). Regarding complications, they occurred in 44%: 6 patients with delayed gastric emptying, 1 biliary fistula, 2 pancreatic fistulas with spontaneous healing in one patient and two postoperative pneumonias. All patients had a suitable postoperative nutritional support (enteral and parenteral). The TEA afforded optimal pain relief both at rest and with activities such as deep breathing, coughing and ambulation in 88% of our patients. Furthermore, it reduces the duration of postoperative gastrointestinal ileus and allows avoiding opioid-induced side effects. We noticed one case of unsuccessful catheter placement and no neurologic injuries. One case of nausea and hypotension arisen as adverse effects related to medications used in TEA. The length of stay in intensive care unit (ICU) and hospital stay were, respectively, 3 days (range, 2-8) and 12 days (range 6-24).

Commentaries:
TEA combined with general anaesthesia associated with perioperative nutritional assistance seems to be a good strategy to manage patients undergoing this complex surgical procedure because it results in faster recovery and fewer complications and shorter length of ICU.
Ang3-Bilateral Pneumothorax and Pneumomediastinum Revealing a Laryngeal Thyroid cartilage fracture after Blunt Trauma

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Introduction:
Laryngeal injury due to a traffic accident is rare and can be under diagnosed if not suspected. Association of a pneumothorax and a laryngeal traumatism is rare, only a case reported in the literature. We present a laryngeal fracture in a child after a blunt chest trauma during a traffic accident that it was revealed by pneumomediastinum and bilateral pneumothorax.

Case report:
A previously healthy 8-year-old girl was knocked down by a cyclist with a direct thoracic impact. At admission, she was unconscious, dyspneic with an oxygen saturation of 40% in room air. Laryngeal hematoma causing a difficult intubation, an emergency tracheostomy was performed on scene. Once, the airway was secured, we found emphysema and edema in the cervico-thoracic area with an important bilateral pleural gas effusion. Consequently a prompt exsufflation was required before a computed tomography scan of the chest. This CT scan showed a bilateral pneumothorax and pneumomediastinum. The pneumothorax evacuation was effective by the insertion of two chest tubes. The evolution of the respiratory and hemodynamic states was favorable. Regarding these clinico-radiologic findings, an upper airway damage was suspected, and the cervical tomography revealed thyroid cartilage fracture. The nasofibroscopic exam found an extensive edema of the left arythenoid cartilage without hematoma. he thyroid fracture was treated surgically and the tracheostomy was maintained in position until laryngeal healing.

Commentaries:
Laryngeal fracture due to blunt trauma is a rare pathology characterized by a delayed diagnosis. As a consequence, it may have a high rate of morbidity and mortality. We will discuss clinical, radiological and therapeutic features.
Ang4-Anesthetic management of the child with an upper respiratory tract infection: a new algorithm

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Children frequently develop upper respiratory tract infections (URI). The decision to proceed with or cancel surgery for the child with a URI remains controversial and difficult. On one hand, the presence of an URI increases the risk of complications, on the other hand these complications can, for the most part, be anticipated, recognized, and treated. In fact, the child with an URI still presents a challenge, but anesthesiologists are now in a better position to make informed decisions regarding the assessment and management of these children, such that blanket cancellation has now become a thing of the past. Despite the importance of this clinical problem, there is no single definition for URI, there is still no consensus regarding the optimal anesthetic management of children with URI who require elective surgery. Although several studies have addressed this issue, it has been difficult to develop evidence-based practice guidelines given differences in study design, URI criteria, and outcomes. We aim from evidence based literature to identify risk factors for perioperative respiratory adverse events, to establish helping form decisions, and to define the means for optimizing anesthetic management.

Ang5-Rhabdomyolysis associated to glossopharyngeal edema: a rare side effect of diclofenac


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Abstract:

Diclofenac potassium is a widely used non-steroid anti-inflammatory drug which is absorbed more quickly than diclofenac sodium. Reported cases of rhabdomyolysis after only diclofenac are rare, we survey three cases in the literature. We report a case of a 50 year-old man, chronic smoker and allergic to aspirin who developed a rhabdomyolysis associated with glossopharyngeal edema after oral administration of diclofenac for dental pain. Rhabdomyolysis associated with glossopharyngeal edema due to diclofenac has not been reported.
Abstract

Objectives:
Description of the epidemiological and clinical characteristics of the patients introducing risk factors of invasive candidiasis. Analysis of risk factors for candidiasis invasive and evaluation of the contribution of colonization index (CI) in the diagnosis of the systematic candidiasis in medical intensive care.

Patients and methods:
Prospective observational study (October 2007 to October 2009). The selected patients present risk factors of system IC candidiasis with an infectious syndrome or clinical signs suggestive of *Candida* infection and hospitalized more than 48 hours in medical intensive care unit. Pittet's colonization index was calculated at admission and then once a week added to a blood culture. Patients were classified according to level of evidence of *Candida* infection and the degree of colonization (CI < 0.5, CI ≥ 0.5).

Results:
The study included 100 patients. Mean age of our patients was 55.8 ± 18.2 years with male prevalence. Neurological disease was the most frequent pathology in admission (48%). The most common risk factors were broad-spectrum antibiotics and foreign material. In the various mycology IC specimens, *Candida albicans* was the most frequent, followed by *C. tropicalis*, then *C. glabrata*. The CI was greater than or equal to 0.5 at 53% of the patients, and less than 0.5 in 47% of the cases. Among the patients, 15% developed an invasive candidiasis. In multivariate analysis, the corticosteroid therapy was associated with a high colonisation (IC ≥ 0.5) and neutropenia with a high risk of systemic candidiasis. The positive predictive value of CI was 26%. The negative predictive value was 98%, the sensitivity and specificity was 93% and 48% respectively.

Conclusion:
CI has the advantage to provide a quantified data of the patient's situation in relation to the colonization. But, it isn’t helpful with patients having an invasive candidiasis in medical intensive care unit.