Unmoderated Posters: Technology and Instruments

UP-66

A Comparison of Prone versus Lateral Decubitus Positioning in Percutaneous Nephrostomy Tube Insertion

Wu, Christopher; Kwong, Justin; Lindsay, Leanne; Vora, Parag; Davies, Timothy
McMaster University, Hamilton, ON, Canada

Introduction and Objectives: No consensus exists on the best position for percutaneous nephrostomy (PCN) tube insertion, though prone positioning is the most widely used, thought to minimize intraperitoneal injuries. However, there is a risk of hemodynamic compromise with this approach with turning the patient from supine to prone position. We describe a new technique of ultrasound guided PCN access in lateral decubitus position under local anesthetic. Our objective was to compare the complications and morbidities after the insertion of a PCN tube in prone or lateral decubitus position.

Methods: Retrospective data collection was carried out on all adult patients that underwent PCN insertion at our institution from August 2008-August 2012. A total of 336 patients (161 men and 175 women) underwent PCN. With regards to positioning, 237 (70.5%) were inserted prone and 99 (29.5%) were inserted in lateral decubitus position.

Results: Univariate analysis between the two techniques showed no significant difference in 30-day complications requiring replacement (10.1% prone, 14.1% lateral; p=0.289), post-procedural ICU admission (5.8% prone, 5.1% lateral; p=0.757), post-procedural transfusion (0.4% prone, 0% lateral; p=0.517) or post procedural hospitalization over 48 hours (2.5% prone, 2.0% lateral; p=0.779). A significant increase in 30-day mortality was seen in the lateral decubitus group (11.1% lateral, 3.4% prone; p=0.005), however, on further review these patients died as a result of underlying pathology and were under palliative measures prior to the procedure.

Conclusions: Our data show that the complications and morbidities associated with both prone and lateral approaches to percutaneous nephrostomy tube insertion were not significantly different, suggesting that lateral decubitus positioning is a safe and effective alternative to prone positioning. Review of current literature shows no prior research describing routine lateral decubitus PCN tube placement.

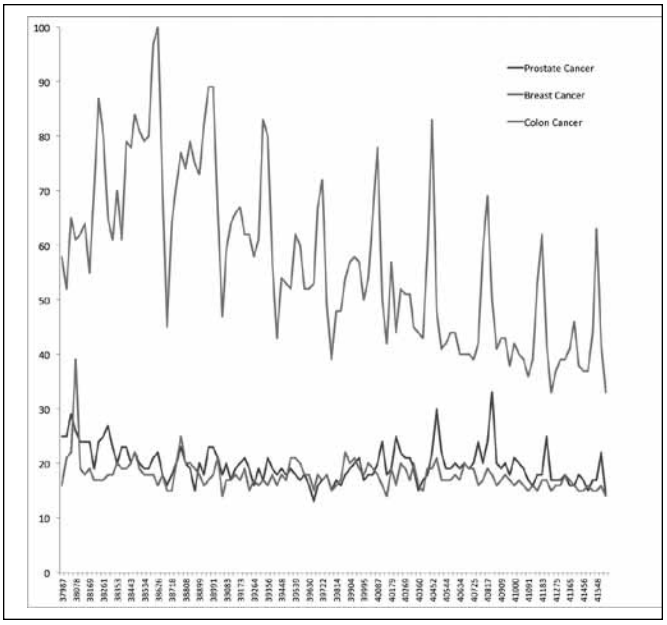

Fig. 2. UP-65. Relative search volumes in Canada for the terms "prostate cancer", "breast cancer" and "colon cancer" from 2004-2013. Data are normalized to reflect the proportion of searches for a given term relative to the others and to the total volume of Google searches for all terms at a given time point.