A Comparative Analysis of the Different Modes of Topical Anaesthesia Utilized for the Administration of Intravitreal Anti-VEGF Injections

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Objective: To investigate the best topical method for anaesthetizing an eye prior to intravitreal injection.

Method: This was a randomized, double-masked, prospective, single-centre trial of patients receiving intravitreal anti-vascular endothelial growth factor (VEGF) injection. Seventy-five patients requiring intravitreal injection were randomized to receive one of three topical anaesthetics: 1) proparacaine drop + proparacaine soaked 'spear' pledget to the injection site for 30 seconds, 2) proparacaine drop + proparacaine drops alone. A pain scale from 1–10 (1 being no pain; 10 being worst pain ever) was conducted immediately after the injection.

Results: The pain score for the intravitreal injection after anaesthesia was comparable for the three techniques used. Proparacaine soaked 'cotton ball' pledget in the inferior fornix had the lowest pain score.

Conclusion: The use of topical proparacaine drops provides very efficient and cost-effective anaesthesia during intravitreal injections, but the 'cotton ball' pledget in the inferior fornix provides the best anaesthesia.

Leadership Styles and the Engagement of Physicians at the Port-of-Spain General Hospital

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Engagement is a concept that has a continuing relevance in the workplace, thus, the need to better understand its relationship with leadership styles. The quality of leadership utilized in an organization can either increase or decrease its organizational performance, as illustrated by research done on leadership. This research focusses on the Port-of-Spain General Hospital, a major trauma centre in Trinidad and Tobago, and aims to determine which leadership styles are most appropriate in providing a positive impact on engagement in order to develop a leadership framework that incorporates and optimizes physician engagement. This will better enable the organization to achieve its missions and goals through training and continual monitoring of engagement through communication.

Questionnaires were administered between March and April 2015 to a total of 308 medical professionals in order to provide insight on how to enhance engagement levels and to measure the perceived levels of engagement and the presence of the democratic, autocratic, transformational and transactional leadership styles on a five-point Likert scale.

Results highlighted that engagement levels in a hospital setting may be associated with a physician's perception of the leadership style used by his/her direct supervisor. Data collected were supported by the literature reviewed, which proposes that leadership styles such as democratic and transformational leadership are more likely to promote greater levels of engagement as perceived by physicians. However, leadership styles such as autocratic and transactional were perceived negatively and could be considered as less suited to optimize engagement levels. Implications from this research would suggest that supervisors/leaders should be keen on adopting leadership styles that foster and optimize levels of engagement.

During the research, there were limitations that could be suggested as future research topics. Leadership styles such as democratic leadership, even though highly influential to engagement, may be considered as 'time-consuming' to implement. The question is how this leadership style may be properly implemented in a fast-paced work environment such as a hospital.

Retinoblastoma: Challenges and Management at the Bustamante Hospital for Children

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¹Bustamante Hospital for Children, Arthur Wint Drive, Kingston, Jamaica; ²University Hospital of the West Indies, Kingston, Jamaica **Background:** Retinoblastoma is the most common intraocular primary tumour of childhood and is usually diagnosed before the age of three years. There is a reported 250 to 300 new cases diagnosed yearly in the United States of America (USA). The incidence of retinoblastoma is unknown in Jamaica. The malignant tumour may be unilateral or bilateral. The treatment modalities include chemoreduction and consolidation procedures such as radiation therapy, photocoagulation, cryotherapy and thermotherapy which attempt to preserve sight and avoid the need for enucleation. These patients may later develop secondary tumours such as pinealomas, sarcomas, carcinomas and melanomas.

Purpose: To report on the medical and surgical course of two patients diagnosed with bilateral retinoblastoma at the Bustamante Hospital for Children, Jamaica.

Method: Retrospective analysis of the management of two patients at the children's hospital who presented with retinoblastoma was done using data from their medical dockets. Fundus photographs, B- scan ultrasound and magnetic resonance imaging (MRI) brain scans were analysed in diagnosing and classifying the tumours.

Results: Both children presented with bilateral retinoblastoma before three years of age and received repeated courses and procedures of chemotherapy and cryotherapy. Enucleation of one eye had to be done for both patients within a year of diagnosis. After four years, one child now presents with recurrence of the tumour in her only eye and a pinealoma. The other patient, after three years, now presents with regrowth of the intraocular tumour as well.

Conclusion: The early diagnosis and treatment of retinoblastoma is crucial in preserving sight and life. Frequent follow-up of these patients is important and should include fundus photography, ultrasonography and MRI studies to evaluate re-growth, metastases and presence of secondary tumours. Plaque, gamma knife and proton particle radiation therapy for ocular tumours are currently not available at the hospital and is thought to be necessary in further treatment of these patients with the hope of structural preservation of their only eye and to avoid enucleation.