Residents' Presentations

Chairperson: DC Swaby

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Efficiency of Patient Flow in the Ophthalmic Theatre at the University Hospital of the West Indies

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Objective: To evaluate the efficiency of patient flow time during elective cases in the Ophthalmic Theatre at the University Hospital of the West Indies.
Methods: During the month of September 2013, an audit of patient flow time in the ophthalmic operating theatre at the University Hospital of the West Indies was carried out. Several parameters were used to assess this efficiency. A record was made of the various times involved in the operating list including the time that the patient was sent for, the time that the patient arrived, the time for anaesthesia and the time the patient left the department. A record was also made of the activities done in-between cases, the adequacy of preparation of the patient for theatre and any reasons for cancellation. The time intervals were then analysed.
Results: The average interval between sending for patients and their arrival in operating theatre was nine minutes (range 3–27 minutes). The average time between anaesthesia and start of surgery was 30.96 minutes (range 1−78 minutes) with the interval being longer for general anaesthesia. The average time taken for patients to reach the recovery room was 9.48 minutes (range 3–27 minutes).
Conclusions: There is room for improvement in the efficiency of usage of theatre time and close attention can lead to improvement in patient flow and possibly an increase in the number of cases that can be facilitated per list.

A Comparative Analysis of First-line Treatment in Open-angle Glaucoma in Trinidad and Tobago

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Aim: To determine the efficacy of first-line medical treatment in newly diagnosed (treatment-naive) patients with open-angle glaucoma.
Method: A retrospective, consecutive series from August 2011 to present was analysed. All patients were examined by a consultant surgeon to include: history, slit lamp examination, Goldmann tonometry, indentation gonioscopy, pachymetry, dilated fundoscopy, stereo discs photography and Humphreys 24-2 SITA perimetry. Treatment included first-line prostaglandin analogues and/or fixed combinations. Patients were reviewed within three months. STATA was used for statistical analysis with Type 1 error set at 0.05. Inclusion criteria: age > 35 years, new diagnosis and treatment initiation (glaucomatous optic neuropathy and/or visual field defect consistent with retinal nerve fibre layer damage). Exclusion criteria: primary angle closure glaucoma, secondary glaucoma and previous complex anterior segment/vitreo-retinal procedures.
Results: Sixty-eight patients were newly diagnosed with open-angle glaucoma in 132 eyes. The mean age was 60.3 (SD 8.93) years, 55.9%; 26.5% (n = 28) had a family history of glaucoma. The pre-treatment intraocular pressure (IOP) mean was 24.5 mmHg (SD 8.59); mean central corneal thickness (CCT) was 537.5 µm (SD 26.4). Almost eighty per cent (78.5%) of patients had a CCT < 555 µm. Univariate analysis demonstrated positive correlation between IOP and CCT; 8.9% had advanced glaucoma; 36.4% of eyes (n = 48) had normal tension glaucoma. Intraocular pressure response: One hundred and two eyes were analysed. Mean IOP reductions were as follows: Travatan® 33.7%, Xalatan® 37.6%, DuoTrav® 44.2% and Xalacom® 39.9%. There was no statistically significant difference in the IOP reduction among the four ocular hypotensives (one way ANOVA, $p > 0.06$)
Conclusion: The epidemiological profile showed that 78.5% of patients had a CCT < 555 µm and 26.5% had a family history of glaucoma. First-line therapy demonstrates good efficacy in a practical clinical scenario in a high-risk population. Patient education and compliance are critical to achieving successful IOP reduction to reduce the risk of progression of glaucoma.

The Impact of Visual Impairment on the Quality of Life of Diabetic Patients Attending the Retina Clinic, University Hospital of the West Indies

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Objective: To assess the impact of visual impairment on the quality of life of patients with diabetic retinopathy.
Method: Vision and health-related quality of life was assessed with a questionnaire.
Results: One hundred and fifty patients were recruited. There were 63% females and 37% males. The mean age was 56.1 ± 10.3 years. The mean body mass index was 25 kg/m^2; 61.4% of patients were overweight. Sixty-three per cent of females and 79% of males had Type II diabetes. The mean LogMAR visual acuity was 0.78. Visual acuities were significantly associated with male gender ($p = 0.049$) and longer duration of diabetes ($p = 0.018$). The impact of visual impairment on quality of life was significant ($p < 0.001$). Poor quality of life was associated with longer duration of diabetes ($p = 0.004$), lower income ($p = 0.008$), lack of regular exercise ($p = 0.021$), poor diet compliance ($p = 0.010$) and males ($p = 0.0$).
Conclusions: Visual impairment in patients with diabetic retinopathy had a significant negative impact on quality of life. Poorer quality of life was associated with male gender, lower income, increased duration of diabetes, absence of a regular exercise routine and poor compliance with a special diet**.** Visual impairment was associated with male gender, increased duration of diabetes and poor compliance with a special diet.

A Comparative Analysis of the Intravitreal Injection Technique Used amongst Ophthalmologists in Trinidad and Tobago

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An assessment of pre-injection, peri-injection and post-injection techniques used by senior ophthalmologists in Trinidad and Tobago for intravitreal drug administration was done and compared to internationally accepted protocols issued by the Royal College of Ophthalmologist (London). Intravitreal injection techniques varied amongst ophthalmologists in Trinidad and Tobago, emphasizing the need for standardization in accordance to internationally accepted protocols.

Is Dilation Necessary for Diabetic Screening in the Caribbean Eye?

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Objective: To provide evidence that dilation is necessary in diabetic screening of Caribbean patients using a non-mydriatic camera.
Method: Fifty patients who were undergoing diabetic screening were randomly selected and fundus photographs, using a non-mydriatic camera, were taken before and after dilation. These pictures were then graded by an experienced grader followed by a secondary grading by an ophthalmologist. The grades assigned for undilated and dilated eyes for each patient were then analysed.
Results: Dilation provided superior fundus photographs for grading.
Conclusion: Even with the use of non-mydriatic cameras, dilation is important for accurate diabetic screening in a Caribbean population. Dilation should therefore be an integral part of screening protocol.