

Prevalence and Risk of Diabetic Retinopathy in Relation to Duration of Diabetes Mellitus in Community Hospital of Lampang

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ABSTRACT : Three thousand and forty nine patients diagnosed with diabetes mellitus were examined in 13 community (district) hospital in Lampang during January – December 1999. Complete eye examination with standard protocols were used to determine the prevalence and severity of diabetic retinopathy. The prevalence of background of non-proliferative diabetic retinopathy (BDR or NPDR) was 18.9% and proliferative diabetic retinopathy (PDR) was 3% in all age group. For relation to the duration of diabetes, it showed that the longer the duration of diabetes the higher the prevalence of diabetic retinopathy. In BDR or NPDR, the retinopathy varied from 13.1 to 22.9% in persons having diabetes for less than 10 years and up to 42.8% in those with diabetes for up to 20 years. In the PDR group, the prevalence was 2.1 to 2.4% in persons with diabetes for less than 10 years and up to 10.2% for those with diabetes for up to 20 years. The severity of retinopathy was found to be not only related to longer duration of diabetes but also related to higher glycosylated hemoglobin levels, higher systolic blood pressure and the presence of proteinuria.

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Normal Ocular Bacterial Flora in Northern Thais

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ABSTRACT Purpose : To describe normal ocular bacterial flora in northern Thais and evaluate the interrelationship between bacteria found on the eyelid margin and conjunctival fornix.

Methods : A prospective study was conducted of 108 consecutive patients who had extracapsular cataract extraction or phacoemulsification. Anaerobic and aerobic bacterial isolation and identification were performed from the eyelid margin and conjunctival fornix.

Results : Mean age of the 108 patients was 66.6 years \pm 10.4 (SD) (range 35 to 90 years). Cultures were positive from 51% of conjunctival fornix swabs ; and 80% of the positive cultures were *Staphylococcus haemolyticus*. Eighty-three percent of the specimens obtained from the eyelid margin were positive cultures ; and 93% of the positive cultures were *Staphylococcus haemolyticus*. There were significant differences in the positive cultures of all bacterial isolation between conjunctival fornix and eyelid margin specimens ($P = 0.0001$).

Conclusion : *Staphylococcus haemolyticus* is a predominant ocular bacterial flora found in both the conjunctival fornix and eyelid margin. This pilot study may be a useful guideline for prophylactic preoperative antibiotic selection.

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Key words : normal ocular bacterial flora, *Staphylococcus haemolyticus*, *Staphylococcus epidermidis*, *Propionibacterium acnes*, *Staphylococcus aureus*.

Comparison of the Efficacy of Prophylactic Topical Antibiotics before Cataract Surgery

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ABSTRACT : **Purpose :** to compare the efficacy of 0.5% chloramphenicol and 0.3% ciprofloxacin eyedrop combined with topical 5% povidone-iodine in the reduction of the normal bacterial ocular flora.

Methods : This is a prospective study. Ninety patients awaiting cataract surgery were randomly divided into three groups consisting of 30 patients each. The first group received 0.5% chloramphenicol eyedrop, and the second 0.3% ciprofloxacin eyedrop to the eye at least 4 times preoperatively. The third group had no prophylactic antibiotic treatment. Cultures were obtained from both the lid margin and conjunctival fornix pre-and-post-antibiotic therapy. All groups were applied with 5% povidone-iodine before surgery. Microbiological identification, colony counts and antimicrobial sensitivity tests were performed.

Results : The mean age of the 90 patients was 67.6 years \pm 11.4 (SD) (range 35 to 91 years). The mean bacterial colonies and species obtained from the eyelid and conjunctival fornix were not significantly different in 3 groups. A significantly lower number of mean colonies in both the eyelid ($p = 0.028$) and conjunctival fornix ($p = 0.012$) was observed in ciprofloxacin-treated eyes compared with chloramphenicol-treated eyes. More than 90% reduction of mean colonies on the conjunctival fornix was found in 0.3% ciprofloxacin combined with 5% of the povidone-iodine group.

Conclusion : This study attempts to compare the efficacy of 0.5% chloramphenicol and 0.3% ciprofloxacin eyedrops that are commonly used before cataract extraction by physicians who assume prophylaxis as a practical value. The data showed that 0.3% ciprofloxacin eyedrop can minimize the mean number of colonies on the eyelid and conjunctival fornix. Species on the conjunctival fornix differed significantly when compared with 0.5% chloramphenicol eyedrop. Larger sample sizes should be considered in further studies.

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Key word : normal ocular bacterial flora, cataract extraction, chloramphenicol, ciprofloxacin, Staphylococcus haemolyticus, Staphylococcus epidermidis, Staphylococcus aureus, Propionibacterium, acnes.

Comparison of Automated Direct Projection Perimeter to an Automated Bowl Perimeter in Determining Visual Field Abnormality

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NO ABSTRACT

Anterior Stromal Punctures for Bullous Keratopathy

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ABSTRACT Objective : Toevaluate the therapeutic effects of anterior stromal puncture (ASP) in patient with bullous keratopathy (BK)

Methods : 5 patients with bullous keratopathy were divided into two groups : 2 patients in localized group and 3 patients in generalized group. They examination included slit lamp examination, pain score, visual acuity, intraocular pressure.

Result : The pain score was decreased in all patients after average follow up time period of 11.4 month (range 6-18 month). Visual acuity, intraocular pressure were not change.

Conclusion : Anterior stromal puncture can alleviate pain in patient with bullous keratopathy.

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Key words : Anterior stromal puncture, bullous keratopathy

Comparative Study of Ishihara Pseudoisochromatic Color Plate and Color Plate Made by “The Institute for the Promotion of Teaching Science and Technology” for Color Blindness

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ABSTRACT : To determine the effectiveness between the Ishihara pseudoisochromatic color plate and the color plate made by the institute for the Promotion of Teaching Science and Technology for color vision test, 96 congenital or acquired color blindness and 96 normal subjects were examined with 13 plate-selected series of both types of color plates. The results showed no statistically significant difference between the Ishihara and the Institute color plates for color vision test in normal subjects and color blindness individuals. The sensitivity and specificity of the Institute color plate were similar to those of the Ishihara plate. The comparison of each correspondent plate between the Ishihara and Institute color vision test obtained the same sensitivity and specificity in all but 4 plates (figure 5, 3, 15, and 7). The small sample size, small number of plates in each series and examination by many ophthalmologists were the disadvantages of this study. We suggest that the Institute plates can be used for self-assessment of color deficiency.

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Modified Sutureless Sclerotomies in Pars Plana Vitrectomy

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ABSTRACT : Purpose : To evaluate the efficacy, advantages, disadvantages and complications of the modified sutureless sclerotomies in pars plana vitrectomy

Methods : The modified pars plana vitrectomy was performed on 65 eyes of 63 patients at Mettapracharak hospital

Main outcome measure : Post – operative intraocular pressure, wound leakage, intraoperative pain, post-operative irritation and post-operative complications at 1 day, 1 month, 3 months, 6 months

Results : 62 (95.4%) of 65 eyes did not require suturing of the sclerotomy sites. No clinically significant complications were encountered.

Conclusions : The modified sutureless sclerotomy technique was found to be safe, more convenient, and easier to perform, especially in eye with small interpapillary fissure.

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Key Words : Pars plana vitrectomy, sutureless sclerotomy

Blindness from Leptomeningeal Metastasis (LM) : A Case Report and Review

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ABSTRACT The sudden onset of blindness in adults, with or without history of malignancy should raised the possibility of meningeal carcinomatosis. The actual mechanism by which blindness occurs is probably a combination of tumour cuffing around optic nerve, direct infiltration and chronic papilledema. We reported a case of blindness from leptomeningeal metastasis from lung cancer. A 55 years old man presented with weakness of right thigh and decreased vision. Investigation revealed of lung infiltrates and CT brain reported hydrocephalus. Malignant cells was demonstrated in CSF and lung biopsy showed bronchioloalveolar carcinoma.

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Key words : Leptomenigeal metastasis. Bronchioloalveolar carcinoma, Blindness

Conjunctival Rhabdomyosarcoma : Case Report

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ABSTRACT A case of conjunctival rhabdomyosarcoma in a five years old Thai girl was reported. The patient had a rapidly progressive exophytic mass at the left lower eyelid. The investigation showed lobulated exophytic highly vascularized mass arising from the conjunctiva. The mass was managed by excisional biopsy. Histopathological study was found to be conjunctival rhabdomyosarcoma ; embryonal type. Chemotherapy was combined. At one year of the tumor removal and chemotherapy the patient is free of recurrence.

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Mooren's Ulcer : Case Report

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ABSTRACT : One patient with progressive bilateral Mooren's ulcer unresponsive to conventional ocular and systemic therapy was treated with IV pulse methylprednisolone. The progressive destructive inflammatory process was arrested. However, unpleasant consequences of drug toxicity occurred. Recognition of drug toxicity, which is treatment, is crucial. IV pulse methylprednisolone may be another option in the treatment of patient with bilateral progressive Mooren's ulcer.

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Key word : immunosuppression, Mooren's ulcer, peripheral ulcerative keratitis