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**Leber congenital amaurosis - a case report**

VAMOS R, FARKAS A, SALACZ G

2nd Department of Ophthalmology, Budapest

**Purpose**

To present a rare, inherited retinal dystrophy with early-onset severe visual impairment.

**Methods**

A 13-month-old girl with lack of visual attention since 3-4 months of age attended our department. Her pupil reactions were sluggish and she had slight moving eye movements. Examination methods included indirect binocular fundoscopy, measuring refraction and electrophysiology. Follow-up: 12 month after the first examination.

**Results**

At the age of 13 months the only retinal alteration was a marbled pattern at the periphery. At the age of 18 months fundoscopy revealed diffuse confluent whitish spots except in the central area within the vascular arcades. Full-field electroretinography was not detectable under either scotopic or photopic condition at repeated examinations.

**Conclusion**

The reported case was clinically diagnosed as Leber congenital amaurosis on the basis of ERG examinations. In cases of unexplained, severe visual impairment in preverbal infants, electrophysiological tests are of prime importance.

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**The Prevalence of Refractive Errors in University Students in Portugal**

JORGES F, FERNANDES P, QUEIROZ A, ALMEIDA IB, PARAFITA MA

(1) Physics (optometry), Braga
(2) Physics, Braga
(3) Surgery (Ophthalmology), Santiago Compostela

**Purpose**

This study was initiated to assess the prevalence of refractive state in university students’ population in Portugal.

**Methods**

A population sample of 199 university students were randomly selected and examined in cycloplegia. The results obtained using the subjective distance refractive method were used in the analysis and the refractive errors were converted into spherical equivalents (SRE) for some analyses (i.e. sphere value + 1/2 of the cylinder value). Myopia was defined as: SRE < -0.25 D, emmetropia as SRE = 0 ± 0.25 D and hyperopia as: SRE > 0.25 D.

**Results**

The refractive error of the sample, ranged from -8.75 to +3.75 D mean spherical equivalent = ± 0.7 ± 1.53 D (Mean ± SD). The maximum amount of astigmatism was ± 2.25 D. The incidence of refractive errors was 21.6% of the students had myopia; 73.2% had emmetropia and 5.2% had hyperopia. Statistically there are no significant differences between male and female (male mean refractive error (MRE) = 0.1 ± 1.55 D; female MRE = -0.06 ± 1.29 D) or any significant MRE differences between the students in the first year or in the last year (1st year MRE = 0.05 ± 1.68 D; 4th year MRE = 0.05 ± 1.29 D). However, the prevalence rates of myopia in females (30%) are higher than the rates in males (14%). And the prevalence rates of hyperopia in 1st year students (57%) are higher than the rates in the 4th year (49%).

**Conclusion**

The results then show an increase of myopia similar to results obtained in other countries. Just like in other studies, ours also revealed a higher prevalence of myopia among women than men, as well as show a myopia shift during the university course.

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**Five-year mortality rate following blind/partially sighted registration in Sunderland, UK**

SETTHIA MADHAVAN (1), VAIDHAN (2), FRASER S (2)
(1) Ophthalmology, Royal Victoria Infirmary, Newcastle Upon Tyne
(2) Ophthalmology, Royal Victoria Infirmary, Sunderland

**Purpose**

To compare five-year mortality rate of the patients registered blind/partially sighted (BPS) with mortality in the general population.

**Methods**

Retrospective study of patients registered blind/partially sighted during one year period in an UK eye hospital. The data was collected from the hospital records and the death registry for the area covered by the hospital. The age at BPS registration and death, the cause of BPS and sex were recorded. The data was age and sex stratified, according to the UK national statistics office for calculating death rates. Statistical analysis was done with and without patients with diabetes and cardiovascular events, using chi-squared test.

**Results**

153 patients were BPS registered in 1995 by the hospital: 92 (60.13%) females and 61 (39.87%) males. The mean age at registration was 73.37 years for the whole sample. However, the mean age at BPS registration for males was 67.04 years and 77.56 years for females. The mean age at death was 83.55 years for the whole sample and 77.7 years for males and 85.77 years for females. The number of deaths in each age group was evenly distributed for the males; the female deaths were concentrated in the older age groups.

**Conclusion**

The expected death rates in our sample were lower than expected compared with the general population for both female/male subgroup and the whole group. It was also observed in this sample that the younger at BPS registration (less than 65 years of age) were more likely to die if visually impaired than general population. This might be because the patients registered blind/partially sighted younger had a higher incidence of cardiovascular disease and diabetes.

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**The prevalence of open angle glaucoma on the west coast of Iceland**

LINDEN C, JÖHANNesson G, GLÖMUNISDOTTIR G (2)
(1) Dept of Clinical Sciences, Ophthalmology, Umeå University, Umeå, Sweden
(2) Ophthalmology Clinic, Akureyri, Iceland

**Purpose**

To establish the age- and sex-specific prevalence of open angle glaucoma (OAG) on the west coast of Iceland.

**Methods**

The compulsory ophthalmologic examination needed for prescription of eye glasses in combination with information obtained from Statistics Iceland were used to retrospectively establish the glaucoma prevalence in the town of Akureyri and to estimate the lowest prevalence for the greater west coast area.

**Results**

79.1% of 1443 inhabitants > 50 years of age in Akureyri had visited the eye clinic at least once during the past 5 years. The overall prevalence of OAG in this population was 4.86% (95% CI 3.6-6.3), with no significant difference between sexes. The lowest prevalence calculated for the west coast as a whole was 3.8% (95% CI 3.3-4.4). The prevalence of OAG increases with increasing age (p>0.001). The predominant glaucoma types were simplex and capsulopatellar glaucoma, similarly distributed.

**Conclusion**

The results with respect to glaucoma prevalence and participation rate are in the same magnitude as in similar studies indicating that the method used in this study is comparable to other methods used to establish glaucoma prevalence.