



THE ROLE OF GENERAL PRACTITIONERS FOR TAKING CARE OF OPEN- ANGLE GLAUCOMA PATIENTS

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ABSTRACT

PURPOSE: To investigate the possible role of general practitioners, considering glaucoma patients. **METHODS:** Written questionnaires were given to forty randomly selected general practitioners considering their role for glaucoma patients, SPSS statistic analysis. **RESULTS:** At the moment in Bulgaria general practitioners' engagement, considering glaucoma is prescribing the medicines, reimbursed by Healthcare insurance fund. Only 27% of the participants would measure the eye pressure if they had the necessary equipment because they don't have enough time, or they don't think that they would manage to do it. **CONCLUSION:** General practice settings are the perfect place for early screening of glaucoma. General practitioners as well as their patients should be provided with more information which is part of the future work of the team.

Key words: questionnaire, eye pressure, screening

BACKGROUND

General practitioners could contribute to taking care of glaucoma, which is a socially important disease, by controlling the risk factors and timely referral to a specialist. The disease takes second place as a cause of blindness, despite the numerous investigations and new methods of diagnostics. There are 60 million people suffering from glaucoma and 7 million of them are blind. (1) The organization of the ophthalmic help considering this disease is of great importance.

PURPOSE

To investigate the possible role of general practitioners considering glaucoma patients

METHODS

Written questionnaires were given to forty randomly selected general practitioners considering their role for glaucoma patients, SPSS statistic analysis.

RESULTS AND DISCUSSION

Glaucoma affects up to 2% of those over the

age of 40 years globally and up to 10% over the age of 80. (2) It is a multifactorial, chronic, progressive neuropathy, characterized by loss of ganglion cells, leading to atrophy of the optic disc nerve and the nerve fibre layer with characteristic changes in the visual field. (3, 4)

At the moment in Bulgaria general practitioners' engagement considering glaucoma is prescribing the medicines, reimbursed by Healthcare insurance fund, even though they could refer patients to ophthalmologist by taking good history and even only by considering their age. This doesn't happen because of the lack of obligations, the restrictions of the referrals and insufficient emphasis on the matter.

There are many articles considering the possibilities and the level of screening for glaucoma in the general practice settings in different countries. For example an investigation took place in Brisbane, where a questionnaire was distributed to 130 randomly selected GPs. Only 15% of the participants were satisfied with their current knowledge and skills concerning primary open- angle glaucoma. 88% felt that patients over 50 years should be screened for the disease. (5) According to an investigation that took place in the UK non-ophthalmically trained staff

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who have received tuition in the use of the equipment, can screen for glaucoma. (6) An Australian investigation showed similar results. (7) According to an article by Dr Podolsky primary care physicians can make a major difference in reducing vision loss by identifying risk patients at an early stage of the disease. (8)

Risk factors for glaucoma include increasing age, (9) black race, positive family history and diabetes. (10, 11) Since many high risk individuals are seen periodically by primary care physicians, general practice settings are a logical site for screening for open angle glaucoma. (12) A brief confidential questionnaire was distributed to primary care physicians in South Alberta. Of the respondents 53% claimed that they routinely screened for glaucoma; more urban than rural physicians did so (57% vs. 44%). The reasons most often given for not screening were lack of equipment and skills, cited by 48% and 30%, respectively. (13)

In our investigations we gave by person written questionnaires to 40 randomly selected GPs. The first part of the survey included some passport data. The other part included 4 questions considering their role for glaucoma patients. 42% of general practitioners who answered to the questionnaire were residents, 22, 5% were specialists, 5% had specialty different from general medicine, but were

working as general practitioners. 20 % weren't specializing at all.

They were asked in the questionnaire when they refer patients to be examined by an ophthalmologist in order to check the eye pressure. 42% (n=17) of the general practitioners answered that they refer patients when they have complaints, 40% (n=16) refer them when they complain and have relatives with glaucoma. 7,5%(n=3) answered that they refer patients to a specialist even only for a family relation to a glaucoma patient. 5% answered that they refer patients considering age and 5% when the patients insist for a referral. Fortunately, only one general practitioner never refers patients for measuring ocular pressure. However, it is still disturbing that such a great percentage of the physicians refer patients to a specialist when they have complaints, as it is clear that open- angle glaucoma has no symptoms until late stages of the disease.

General practitioners don't have any devices to help them measure the ocular pressure in general practice settings. They can have some orientation by palpation, which is performed by gently pressing the index finger against the cornea of a closed eye.

Figure 1 shows the distribution of answers to the question if general practitioners perform palpation and when if they do. 60% of them never perform the investigation.

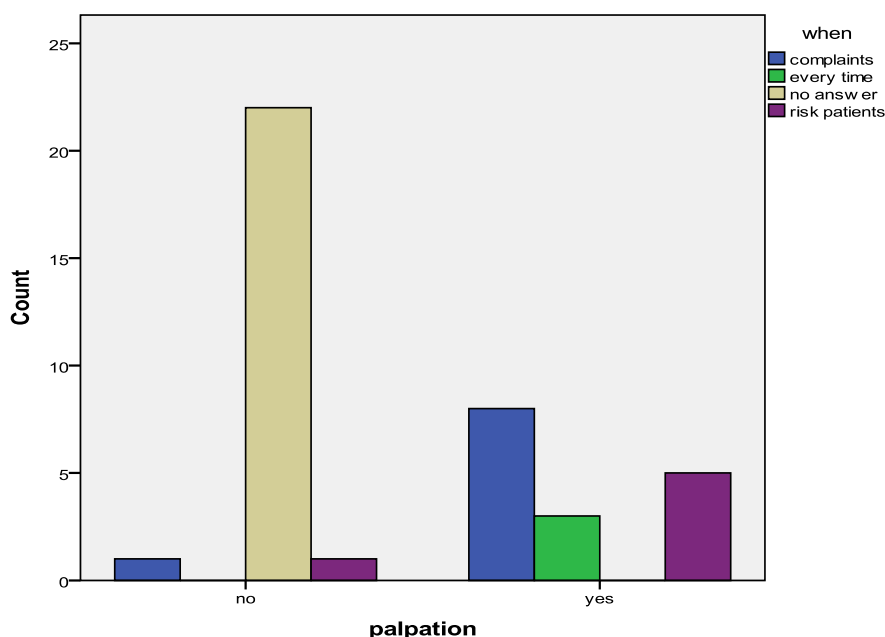


Fig. 1. Eye pressure examination by general practitioners

Many different diagnostic methods (14) for identifying glaucoma have been investigated that can be used in early detection of glaucoma in general practice settings- different kinds of tonometers, perimeters and the use of ophthalmoscope. For example according to article published in 1978 Schiøtz tonometer is the best for general use. (15) Screening took place in Nottingham in 1990 using semi-automated intraocular pressure and visual field equipment operated by non-ophthalmologically trained staff. The sensitivity and specificity of the non-contact tonometer were 91,7% and 95,6%. (16) The purpose of a study from 1992 was to compare the effectiveness of noncontact tonometry using the Pulsair with that of conventional tonometry using Goldmann applanation tonometers. Non- contact tonometry correctly identified over 90% of the patients with intraocular pressure greater than 22 mm Hg. (17) According to Norwegian investigation the cut-off point in measuring ocular pressure by general practitioners should be kept low to avoid false reassurance of glaucoma patients that they don't have glaucoma, possibly as low as 17 mmHg. (18) The main aim of the study that took place in Norway was to estimate the specificity of oculokinetic perimetry for glaucoma case-finding in general practice. Test specificity was 94%. However, the proportion of false-positive tests seems to be too high to be used in mass screening. (19) There are articles on Tono-pen and Perkins tonometry use in the hands of GPs as well. (20, 21)

The general practitioners in our investigation were also asked if they would measure the eye pressure if they had the necessary equipment. Only 27, 5% of them would do it. Most of them (55%) point out as a reason not to do the investigation insufficient time, 15% don't think that they would manage with performing the investigation and 2,5% don't give any answer.

Using SPSS non-parametrical analysis we reject the null hypothesis in most of the questions that we have asked the general practitioners. ($P < 0,05$). Only the question if they perform palpation doesn't reject the null hypothesis and the answers are not significant enough.

CONCLUSION

General practitioners in Bulgaria perform screening for open angle glaucoma by referring some patients of risk to an ophthalmologist but

they still are not very clear with the early development of the disease as well as the risk factors. As most of them are not willing to measure eye pressure in general practice settings at least they should be provided with more information considering the risk factors of the disease. Creating brochures and compact discs with information for general practitioners in Bulgarian language is part of the future work of the team.

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