are drawn as to its general applicability, but further studies should be designed to compare its sensitivity and specificity to the established techniques presently being used for parasitic identification. If this technique could compare favorably to the stool collection methods, it would serve as a simple, direct method for the ambulatory care setting. Also, it would be helpful to expand the evaluation of the digital rectal examination to include its ability to identify intestinal protozoa. This method could prove especially helpful in screening programs for Southeast Asian refugees.

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Glaucoma Detection in **Family Practice Residencies**

James B. Tucker, MD Syracuse, New York

Glaucoma is an insidious disease, the second leading cause of blindness in the United States today.1 The precise definition of glaucoma is somewhat controversial, particularly in the interrelationship of increased intraocular pressure, cupping of the optic nerve head, and visual field loss. While an exact definition is debated, there remains no disagreement about the devastating potential of the disease. It is currently felt that well over one million Americans have significant visual impairment because of glaucoma. In many instances early detection and appropriate therapy could have prevented or lessened this vision loss. 1,2

When the National Society to Prevent Blindness sponsored the First National Conference on Glaucoma Detection and Treatment in January

1980, the diagnostic role of the family physician received great attention.1 Family physicians and other primary care specialists (the general internist and general pediatrician) are the funnel through which the vast majority of Americans enter our health care system. Preventive medicine and the early recognition of disease processes are crucial to these disciplines.

Current detection techniques for glaucoma are imperfect. A major challenge facing the medical community is to determine the most effective means of glaucoma detection and to achieve widespread implementation of this method. Current recommendations include both tonometry and ophthalmoscopy for office evaluation. Particular attention should be given to high risk populations: the elderly, severe myopics, blacks, diabetics, hypertensives, and those with a family history of glaucoma.

A review of the family medicine literature, however, seems quite contrary to the information presented at the First National Conference on Glaucoma Detection and Treatment. With a single exception,3 preventive medicine/health mainte-

From the Department of Family Practice, Upstate Medical Center, State University of New York, Syracuse, New York. Requests for reprints should be addressed to Dr. James B. Tucker, Department of Family Practice, Upstate Medical Center, 301 Prospect Avenue, Syracuse, NY 13203.

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nance discussions in the family medicine literature either do not address office glaucoma detection, question the value of routine tonometry, ignore ophthalmoscopy as a tool for glaucoma detection, and/or do not recommend routine evaluation for glaucoma. Articles on glaucoma often focused on treatment rather than detection, and when detection was highlighted, the value of identifying and screening high risk patients was ignored. 10,11

In the late spring of 1980, a questionnaire was prepared to determine the present status of glaucoma screening and ophthalmologic training in family practice residencies.

Methods

A questionnaire with a cover letter explaining the nature of the project was mailed to the director of each accredited family practice residency in the United States. A response rate of 66.2 percent was achieved as 233 of 352 questionnaires were returned completed.

Results

There seems to be little consistency among family practice residencies in the approach to glaucoma.

It was found that only 67.8 percent (158/233) "routinely" screen for glaucoma in the model unit. When "routine" screening is done, there is great variability from program to program as to who is screened. "Older than age 40" was the main indicator used by programs that screen, being cited by 72.1 percent (114/158). High risk populations are usually not recognized for special attention: "family history" 43.7 percent (69/158), "associated conditions" 22.2 percent (35/158), and "blacks" 5.1 percent (8/158).

When "routine screening" is done, tonometry is universally employed (158/158). However, ophthalmoscopy is added only 46.2 percent (73/158) of the time and visual fields are evaluated by only 25.3 percent (40/158). In 93 percent (147/158) of the programs that screen, the residents themselves are required to perform the evaluation.

Most residencies have required rotations in ophthalmology, but 15 percent (35/233) offer only elective participation and 3.4 percent have no clinical experience. Nearly 66 percent (153/233) of programs expect active preceptor teaching about

glaucoma in the model unit. Annual didactic sessions addressing glaucoma are utilized by 51.1 percent (119/233) of programs, while another 25.3 percent (59/233) offer didactic conferences less often than annually.

Only a few residencies (26/233) are currently involved in community glaucoma detection projects. However, over 60 percent (143/233) of program directors feel their residents would be interested and would be allowed to participate in such programs.

Comment

Several areas of confusion and misunderstanding are evident from the results of this study. A concerted and joint effort must be made by the National Eye Institute, the National Society to Prevent Blindness, the National Conference on Glaucoma Detection and Treatment, the American Ophthalmologic Society, the American Academy of Family Physicians, and the Society of Teachers of Family Medicine to draft the basic standards of glaucoma detection for the practicing family physician. The basic concepts must be incorporated into the curriculum of all family practice residency programs.

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