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Awareness of intraoperative floppy-iris syndrome among primary care physicians

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Following the first report describing intraoperative floppy-iris syndrome (IFIS) in 2005, extensive efforts have been made to educate prescribing physicians about the association of IFIS with systemic α_1 -antagonists such as tamsulosin.^{1–3} In 2005, the U.S. Food and Drug Administration issued a new label warning about this association and Boehringer Ingelheim, manufacturer of Flomax (tamsulosin), issued a letter to all physicians highlighting the same association. The American Society of Cataract and Refractive Surgery (ASCRS) and the American Academy of Ophthalmology (AAO) jointly issued a public statement in 2006 advising patients to report any prior α_1 -antagonist medication history before having cataract surgery.

Despite these efforts, 96.8% of primary care physicians surveyed in the United Kingdom in 2007 were unaware of IFIS and 91% of ASCRS members surveyed in 2008 thought there was inadequate prescriber awareness of IFIS.^{4,5} Therefore, ASCRS and AAO jointly issued a 2008 IFIS educational update statement asking prescribing physicians to consider involving the ophthalmologist prior to initially prescribing α_1 -antagonists in patients with known cataracts. Prescribing physicians were asked to encourage patients to report any history of α_1 -antagonist use to their ophthalmologist prior to having any eye surgery. These recommendations were disseminated by the American College of Physicians and the American Academy of Family Physicians (AAFP) to their members. In addition, in 2008 a guest editorial by one of the authors (D.F.C.) reviewing IFIS was published in the AAFP journal, *American Family Physician*, with a circulation of more than 190000.⁶ Finally, the 2011 revision of the American Urological Association Guidelines for benign prostatic hyperplasia (BPH) management cites 11 references (out of 39 total) relating to IFIS. We decided to formally assess the impact these educational efforts have had on clinicians treating BPH in the San Francisco Bay Area.

Our study was deemed exempted from review by the University of California, San Francisco (UCSF) Committee for Human Research. We developed a questionnaire regarding prescribing practices for the medical treatment of BPH and awareness of any drug association with IFIS. We emailed this brief online survey to 350 healthcare providers in the UCSF/San Francisco Bay Area Collaborative Research Network. Of the 133 respondents, 67.7% (n = 90) practiced family medicine, 18.0% (n = 24) practiced general internal medicine, 8.3% (n = 11) were nurse practitioners, and 6.0% (n = 8) identified themselves as “other.” The majority of participants (63.2%) had been in practice for at least 10 years. Twelve (9.0%) were in training, and the rest had been in practice fewer than 10 years. Forty percent (n = 53) initiate BPH medical treatment at least twice a month.

Alpha-1-antagonists were the first-line BPH treatment for 97.0% of the respondents. During the past year, tamsulosin, terazosin, doxazosin, and alfuzosin had been prescribed by 89.3%, 74.1%, 51.2%, and 4.6% of respondents, respectively. Each was listed as the most commonly prescribed α_1 -antagonist by 44.3%, 35.1%, 12.2%, and 0.8%, respectively (Figure 1). For patients with symptomatic BPH and cataract, 42.8% of respondents reported no preference among the different classes of BPH medications; selective α_1 -antagonists, nonselective α_1 -antagonists, or 5- α reductase inhibitors would be the first choice of 19.8%, 17.6%, and 19.9% of respondents, respectively.

Only 46 respondents (35.2%) were aware that α_1 -antagonists can cause cataract surgical complications. The source of information for these 46 respondents was, in descending order of frequency, medical journals (50.0%), ophthalmologists (26.1%), primary care colleagues (15.2%), patients (6.5%), urologists (6.5%), and drug companies (2.2%) (Figure 2). Only half of those aware of IFIS ($n = 23$) factored this knowledge into treatment considerations. Disappointingly, 90.1% of respondents do not ask patients about their history of cataract symptoms prior to initiating α_1 -antagonist treatment and only 31.3% regularly advise patients to inform their ophthalmologist about taking these drugs. An overwhelming number of respondents (96.2%) desired more information on this topic. At the conclusion of the online survey, all respondents received an informational handout on IFIS.

The apparent ineffectiveness of previous educational efforts underscores the importance of provider-to-provider education and communication. Instruments such as our survey may be used to educate prescribing doctors. Considering that more than 3 million cataract surgeries are performed annually and α_1 -antagonists are universally prescribed for symptomatic BPH, it may be time for renewed efforts at educating primary care physicians about IFIS.

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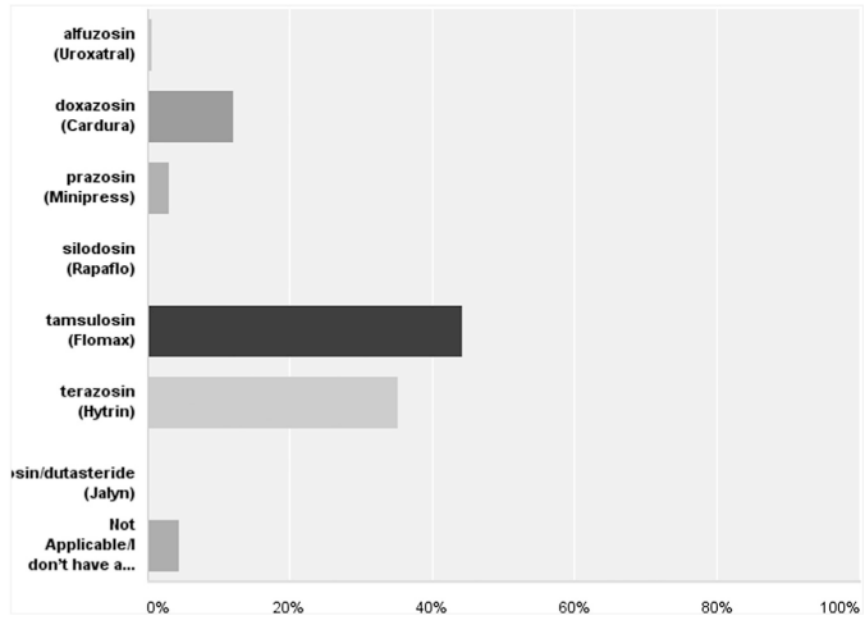


Figure 1. Most frequently prescribed alpha blocker medications in treatment of BPH.

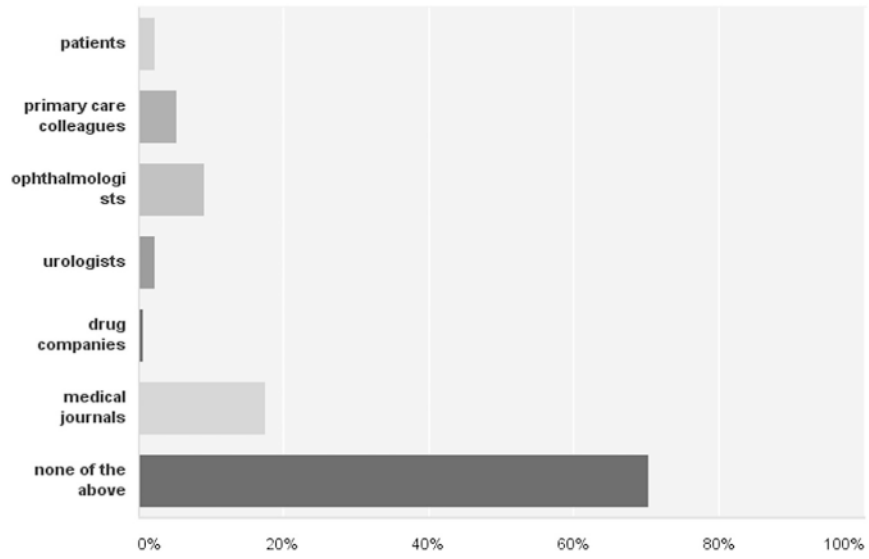


Figure 2.
Reported sources of information about ocular complications of alpha blockers.