Topiramate Use and Angle Closure Glaucoma

Khichar Shubhakaran

Professor Neurology, Dr. S.N. Medical College, Jodhpur, Rajasthan Sir ,

I read an interesting correspondence by Patel and colleagues published in June 2018 issue of our esteemed journal (JAPI Vol. 66, 2018; page No.111). The authors have very well revised the side effects mainly the ocular ones and the doses with which they occur. Here I would like to share my experience and views as under-

- 1. The eminent authors have said that the ocular side effects are not mentioned in the standard text books of medicine and pharmacology. I do not agree with this statement as the side effects are very well mentioned in standard text books.^{1,2} Furthermore The USFDA after it's approval of topiramate use in 1996, has issued the warning of ocular side effect in 2001.^{3,4}
- 2. I am using topiramate for more than a decade, of course in low doses mostly and found the side effects in only 2 patients, in one with a very low dose that is 12.5 mg alternate dosing schedule⁴ in which the patient developed side effect in form of angle closure glaucoma with second dose; and in another one with 25 mg per day with side effect occurring on 8th day of therapy. Both of my patients were females. As per author review, case studies and my experience, I think the Indian population may be vulnerable to these side effects at lower doses. As with authors case series of 4 patients, my 2 patients were also females so it require further studies that whether females are predisposed or there is more use of topiramate in females. The incidence which is mentioned in standard texts may be more in

comparison to my experience; the one explanation for that may be use of lower doses by me in my clinical experience.

As the drug has an excellent profile specially in obese patients, so it is of immense worth in headache, seizure, bipolar disorders, drug abstinence etc., so it may be worthwhile to observe such side effects with patient counselling, close observation and screening by means of optical coherence tomography (OCT)^{3,4} which is widely available now a days.

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Reply from Author

Mukundkumar V Patel

Consultant Physician, Dhruv Healthcare Multispeciality Hospital, Ahmedabad, Gujarat Sir.

It's my great pleasure to respond Dr. Khichar Subhakaran's comments of our article "Topiramate Induced Serious Occular Side Effects". I am thankful to Dr. Khichar Subhakaran, senior eminent neurology professor of our country for reviewing our article.

- 1. We have referred latest edition of pharmacology and general medicine text books. I agree with his comment, but unfortunately, we have not referred neurology books he has suggested. Harrison's principle of internal medicine latest edition has mentioned "topiramate should be used with caution in patients susceptible to glaucoma and renal stone diseases",¹ but ocular side effects in-depth are not described.
- 2. Dr. Khichar sir's vast experience of topiramate side effects is matching with our study. It occurs at lower dose and females are more vulnerable in India. This consensus requires large scale study and it is

possible by inviting "topiramate ocular side effect" cases from our esteem members through JAPI in specific format. Glaucoma at lowest 12.5 mg dose in one of his patient suggest idiosyncratic reaction of the drug.

Topiramate is a drug of choice in 3. certain profile patients in many indications. Our aim of present article was to motivate physicians regarding counselling of ocular side effects of the drug and to start with lower dose. Dr Khichar has suggested OCT screening for glaucoma, but is it practical to do in all patients before prescribing topiramate? The drug also can cuase other ocular side effects like palinopsia, Allice in wonderland syndrome (AIWS).² In my opinion detail ocular side effect counselling is enough to pick up them early.

References

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