Cataract Risk 15% Higher in Current SSRI Users

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Selective serotonin reuptake inhibitor use may lead to an increased risk of cataract development, a study by Canadian researchers has shown.

In a large nested case-control study, the researchers found that certain SSRIs correlated with an increased likelihood of cataract diagnosis and cataract surgery.

"We don't want people to stop their medicine or switch," lead author Mahayar Etminan, Pharm.D., of the Vancouver Coastal Health Research Institute—said in an interview. "We don't want to stress the message of 'drug A increases risk over drug B' but rather the overall risk as a class effect. We want to shed light on cataracts as a possible side effect."

The study considered data from a cohort of 206,624 Quebec residents aged 65 or older. Researchers found that of the study's 18,784 cases diagnosed with cataracts, the 5.7% who were current selective serotonin reuptake inhibitor (SSRI) users were 15% more likely to be diagnosed with cataracts or undergo cataract surgery than non-SSRI users. Overall, the study found that it took an average of 656 days between the commencement of SSRI therapy and a diagnosis of cataracts (Ophthalmology 2010;117:1251-5).

The study did not find a link between past SSRI use (individuals who had ceased taking SSRIs 30 days prior to diagnosis) and cataract development.

The findings come with some precedent. The use of amitriptyline, a tricyclic antidepressant, was linked to an increased risk of cortical cataracts in an earlier study (Ophthalmology 2001;108:1670-4).

Additionally, research conducted in animal models had shown an association between increased serotonin levels and cataract clouding.

Dr. Etminan and colleagues were the first to specifically examine the cataractogenic risks of SSRI use in humans, however.

While the study does not prove causation, its findings reveal an association between cataract complications and the use of the SSRIs fluvoxamine and paroxetine and the serotonin and norepinephrine reuptake inhibitor venlafaxine. The results did not reveal a statistically significant association between cataract development and other commonly prescribed SSRIs.

In the study's findings, compared with those who never took SSRIs, current fluvoxamine users had the highest levels of cataract risk, increasing the likelihood of undergoing cataract surgery by 51% (rate ratio 1.51, after adjustment for variables such as sex, hypertension, and antihypertensive use). Users of paroxetine, according to the study, were 23% more likely to undergo surgery. Venlafaxine—which in 2007 was the 12th most-prescribed drug in the United States with 17 million prescriptions—increased the likelihood of surgery 34%, the researchers wrote. In an interview, Dr. Etminan said that the variations between the individual drug results in this early study could be chalked up to random chance or measurement error.

Future studies would be needed to effectively determine the cataract risks of the individual agents, Dr. Etminan said. The study, Dr. Etminan and colleagues acknowledged, could not control for smoking histories or undiagnosed cataracts. The study investigators acknowledged that it "may have lacked adequate power to assess the risk of cataracts with all individual antidepressants."

Representatives from SSRI manufacturers Pfizer and GlaxoSmithKline responded by saying their companies would need more time to review the study before commenting.

Representatives from Jazz Pharmaceuticals, which manufacturers fluvoxamine, did not respond to requests for comment by press time.

Going forward, Dr. Etminan said he hoped that further research would help doctors identify an antidepressant that would offer a safe choice for, say, an elderly patient recovering from cataract surgery.

The researchers stated that they had no relevant conflicts of interest. ■