Exposure to sibutramine during pregnancy
Facundo Garcia-Bournissen MD  Alon Shrim MD  Gideon Koren MD FRCPC

ABSTRACT

QUESTION One of my patients who was taking sibutramine to lose weight found out that she had unexpectedly conceived. The medication was stopped as soon as she found out, about 5 weeks into the pregnancy. Is the baby at risk? Should the pregnancy be aborted?

ANSWER No data to date suggest that involuntary exposure to sibutramine during pregnancy carries major risk of congenital malformations. Nevertheless, this medication should be avoided whenever possible during pregnancy, as there is little information on its effects.

Sibutramine is a serotonin-noradrenaline reuptake inhibitor originally developed as an antidepressant, but later marketed as a weight-reducing agent, owing to its strong effect on food intake, energy expenditure, and satiety.1,2 It has been in clinical use for several years for treatment of obesity that does not respond to other measures, such as diet and exercise.2 Owing to potential side effects, its use should strictly follow published guidelines. These guidelines indicate it should be used along with diet and exercise for obese patients with body mass indexes >30 and no other risk factors or for patients with body mass indexes >27 with risk factors for cardiovascular disease (hypertension, diabetes, or hyperlipoproteinemia).3–5 Sibutramine is not recommended for patients with heart disease or at risk of stroke, or for patients taking monoamine oxidase inhibitors or serotonin reuptake inhibitors.1

There is little published evidence on human pregnancy outcomes following exposure to this medication during gestation. Studies of rabbits have shown fetal toxicity (cardiovascular malformations) only at doses that induced maternal toxicity, and studies of rats have shown no consistent pattern of malformations.6

We found only 3 reports on sibutramine exposure during pregnancy. A 2004 Motherisk study prospectively observed 10 pregnant women exposed to sibutramine. Among the 10 women, 7 had live births, 2 had spontaneous abortions, and 1 had an elective termination. No malformations were observed.6 A subsequent study described 52 pregnant women exposed to sibutramine during the first trimester.7 No malformations were observed, although there seemed to be more premature deliveries and hypertensive complications (7 cases of preeclampsia) in the treated group than in the control group. The authors of the study acknowledged, however, that the women exposed to sibutramine had risk factors for hypertension and that the lack of an appropriate comparison group was a limitation of the study. Finally, a study of 2 women exposed to sibutramine during the first trimester found no malformations, and the babies were said to be healthy.8

Even though the data available are sparse, no evidence suggests that sibutramine is a major teratogen. No malformations were observed in the 64 cases reported in the literature to date. The paucity of published information on use of this medication during pregnancy, however, precludes a more definitive conclusion.

There is no reason to date to suggest that involuntary exposure to sibutramine during pregnancy puts babies at major risk of congenital malformations. Nevertheless, this medication should be avoided, whenever possible, during pregnancy because weight-reduction agents should not be used during gestation, given the potential risk of neural tube defects9 associated with weight loss during pregnancy.

References

RéSUMÉ

QUESTION L’une de mes patientes prenait de la sibutramine pour perdre du poids, quand elle s’est rendu compte de sa grossesse imprévue. Elle a cessé ses médicaments aussitôt qu’elle a su qu’elle était enceinte, à environ 5 semaines de gestation. Le fœtus est-il à risque? Faudrait-il mettre un terme à la grossesse?

RÉPONSE Aucune donnée jusqu’à présent ne laisse entendre qu’une exposition involontaire à la sibutramine durant la grossesse entraîne un risque majeur de malformations congénitales. Par contre, ce médicament devrait être évité dans la mesure du possible pendant la grossesse compte tenu de la rareté des renseignements concernant ses effets.

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References


Motherisk questions are prepared by the Motherisk Team at the Hospital for Sick Children in Toronto, Ont. Dr Garcia-Bournissen and Dr Shrim are members and Dr Koren is Director of the Motherisk Program. Dr Koren is supported by the Research Leadership for Better Pharmacotherapy during Pregnancy and Lactation program and, in part, by a grant from the Canadian Institutes of Health Research. He holds the Ivey Chair in Molecular Toxicology at the University of Western Ontario in London. Dr Garcia-Bournissen received funding from the Clinician Scientist Training Program, which is funded fully or in part by the Ontario Student Opportunity Trust Fund–Hospital for Sick Children Foundation Student Scholarship Program.

Do you have questions about the effects of drugs, chemicals, radiation, or infections in women who are pregnant or breastfeeding? We invite you to submit them to the Motherisk Program by fax at 416 813-7562; they will be addressed in future Motherisk Updates.

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