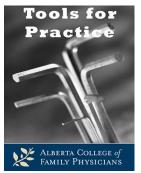
Tools for Practice is proudly sponsored by the Alberta College of Family Physicians (ACFP). ACFP is a provincial, professional voluntary organization, representing more than 4,000 family physicians, family medicine residents and medical students in Alberta. Established over fifty years ago, the ACFP strives for excellence in family practice through advocacy, continuing medical education and primary care research. <u>www.acfp.ca</u>

February 29, 2016



Flibanserin: Feeling frisky or falling over?

Clinical Question: Does flibanserin improve sexual desire and the number of satisfying sexual episodes for women?

Bottom-line: Flibanserin results in ~7% improvement in desire and 0.4-1 additional "satisfying" sexual event per month. However, it is also associated with adverse events like dizziness or somnolence for one in 10-15 women. Concerns regarding hypotension, syncope, and interactions with commonly used drugs (particularly alcohol) are worrisome and require further research.

Evidence:

- Four double-blind randomized controlled trials of 1,581,¹ 880,² and 1,087³ premenopausal women and 949⁴ postmenopausal women with Hypoactive Sexual Desire Disorder. Flibanserin (versus placebo) demonstrated:
 - Statistically significant increase in "satisfying" sexual events: 0.4-1/28 days.^{3,4}
 - No increase daily sexual desire.^{1,2}
 - Increase in Female Sexual Function Index-Desire domain:
 - 0.3-0.4 on scale of 1.2-6.0.¹⁻⁴
 - Number Needed to Harm (NNH) for any investigator defined adverse event =5, dizziness =10-15, somnolence =10-14, nausea =13-25, fatigue =29-42.³
 - US Food and Drug Administration (FDA) review (including unpublished data)⁵ reports NNH for any serious adverse event =250, syncope =500.
 - Study limitations:
 - Strict exclusion criteria (example no benzodiazepines, sleep aids, narcotics, antidepressants).¹⁻⁴
 - Change in primary outcome to find statistical significance.^{3,4}
 - Poor adverse events and drug interactions reporting.^{1,2}

Context:

- FDA assessed phase 1-3 studies with 6,439 women reports safety concerns regarding hypotension, syncope, and somnolence, worsened with alcohol, oral contraceptives, and antifungals (among others).⁶
- Among 25 patients (23 male) given both alcohol (0.4g/kg) and flibanserin, 17% developed hypotension and/or syncope requiring intervention.⁶

- Following the second FDA rejection, an advocacy campaign entitled "Even the Score" (sponsored in part by flibanserin manufacturers) claimed the FDA was exhibiting gender bias by rejecting flibanserin.^{7,8}
- FDA approved flibanserin for Hypoactive Sexual Desire Disorder on its third application, with a risk mitigation strategy including alcohol contraindication and further research.^{6,8,9}
- Flibanserin has not yet been approved for use in Canada.

Authors:

Christina Korownyk MD CCFP, Robert Webster MD CCFP

Disclosure:

Authors do not have any conflicts to disclose.

References:

- 1. Thorp J, Simon J, Dattani D, et al. J Sex Med. 2012 Mar; 9(3):793-804.
- 2. Derogatis LR, Komer L, Katz M, et al. J Sex Med. 2012 Apr; 9(4):1074-85.
- 3. Katz M, DeRogatis LR, Ackerman R, et al. J Sex Med. 2013 Jul; 10(7):1807-15.
- 4. Simon JA, Kingsberg SA, Shumel B, et al. Menopause. 2014 Jun; 21(6):633-40.
- FDA Briefing Document. Joint Meeting of the Bone, Reproductive and Urologic Drugs Advisory Committee (BRUDAC) and the Drug Safety and Risk Management (DSaRM) Advisory Committee. June 4, 2015. Available at: <u>http://www.fda.gov/downloads/AdvisoryCommittees/CommitteesMeetingMaterials/Drugs/DrugSafetyandRiskManagementAdvisoryCommittee/UCM449088.pdf</u>. Last accessed January 19, 2016.
- Centre for Drug Evaluation and Research. Risk Assessment and Risk Mitigation Review(s) Available at: <u>http://www.accessdata.fda.gov/drugsatfda_docs/nda/2015/022526Orig1s000RiskR.p</u>
- <u>df</u>. Last accessed January 19, 2016.
 7. Even the Score [website]. <u>http://www.eventhescore.org</u>. Last accessed January 19, 2016.
- 8. Moynihan R. BMJ. 2014 Oct 17; 349:g6246.
- 9. Joffe HV, Chang C, Sewell C, et al. N Engl J Med. 2016 Jan 14; 374(2):101-4.

Tools for Practice is a biweekly article summarizing medical evidence with a focus on topical issues and practice modifying information. It is coordinated by G. Michael Allan, MD, CCFP and the content is written by practicing family physicians who are joined occasionally by a health professional from another medical specialty or health discipline. Each article is peer-reviewed, ensuring it maintains a high standard of quality, accuracy, and academic integrity.

The ACFP has supported the publishing and distribution of the Tools for Practice library since 2009. If you are not a member of the ACFP and would like to receive the TFP emails, please sign up for the distribution list at http://bit.ly/signupfortfp. Archived articles are available at no extra cost on the ACFP website.

You can now earn credits on Tools for Practice! In August 2014, the ACFP launched <u>GoMainpro, an online</u> accreditation tool to help facilitate MAINPRO® accreditation for the ACFP's Tools for Practice library which has been accredited for Mainpro-M1 credits by the College of Family Physicians of Canada (CFPC). The combination of the CFPC's Direct Entry Program and GoMainpro's tracking and reporting features provide an easy and convenient way to earn Mainpro-M1 credits.

This communication reflects the opinion of the authors and does not necessarily mirror the perspective and policy of the Alberta College of Family Physicians.