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**What Sex Is Safe for Heart Patients: A New Approach Using the KiTOMI Model  
New Study Published in the *Canadian Journal of Cardiology* Dismisses Myths and Provides  
Practical Recommendations for Healthcare Providers Counseling Patients About Sexual Activity**

Philadelphia, PA, November 5, 2015 – Changes in sexual satisfaction and decreases in sexual activity are often reported by heart patients. Both patients and partners may have misconceptions about the perceived dangers of sexual activities and commonly restrict their activities. However, in a new study in the *Canadian Journal of Cardiology*, researchers provide a comprehensive and updated review of the relevant literature and offer evidence- and expert-based practical recommendations regarding sexual activity in heart patients.

“Our extensive literature review enabled us to dismiss several myths regarding the advisability of sexual activity in heart patients,” commented lead author Ricardo Stein, MD, DSc, of the Cardiology Division of the Federal University of Rio Grande do Sul, Brazil. “Overall, the risk of death during sex is very low for most clinically stable heart patients, and interestingly, even much lower for the women.”

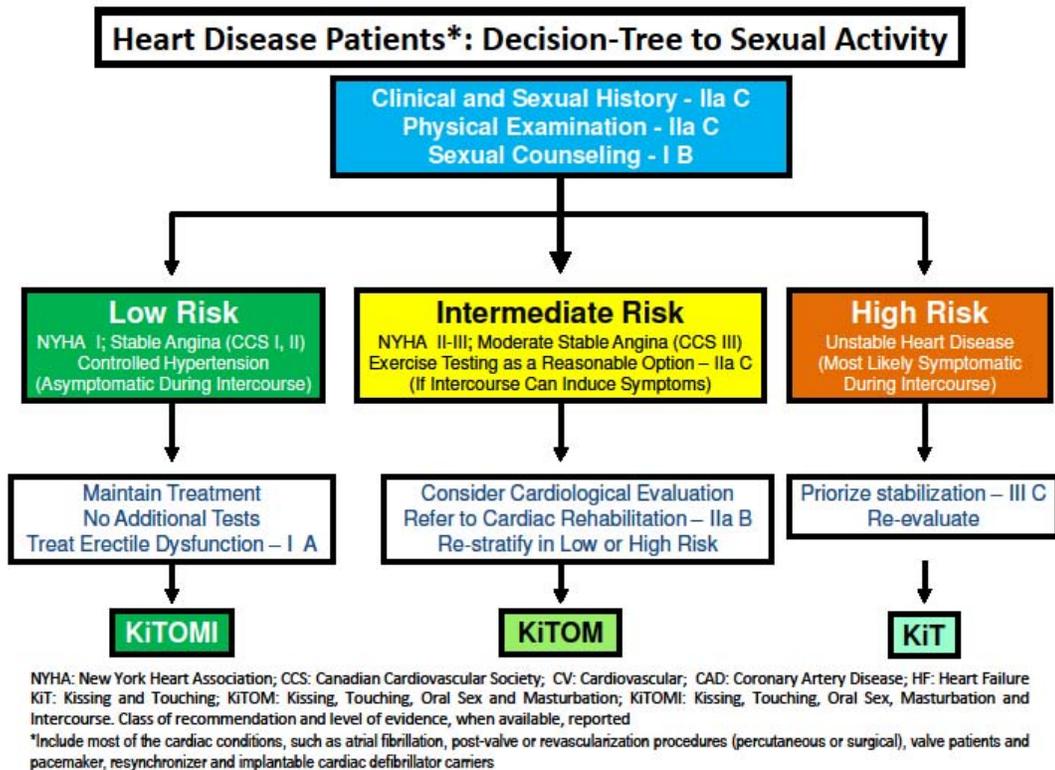
Sexual activity, particularly coitus, is a major aspect of health-related quality of life and is often considered the most pleasant and rewarding form of exercise performed. Sexual activity is typically well-tolerated by most clinically stable heart patients, who are typically advised to participate in exercise programs as part of their recovery plan. Occurrence of sudden cardiac death is very rare, corresponding to less than 2% of all exercise-related deaths.

Counseling regarding how to gradually resume habitual sexual activity is critical for patients who have experienced a cardiac event or undergone a cardiac procedure. Sexual activity encompasses several behaviors such as kissing (Ki), touching (T), oral (O), masturbation (M) and vaginal/anal intercourse (I). The authors propose the acronym KiTOMI to represent these behaviors.

“Our KiTOMI model will allow healthcare professionals to provide very simple and objective advice to their patients,” explained lead investigator Claudio Gil S. Araújo, MD, PhD, of the Heart Institute Edson Saad, Federal University of Rio de Janeiro, and the Exercise Medicine Clinic – CLINIMEX. “In almost every case some type of sexual activity would be permitted. For patients whose condition is more debilitated, KiT would be the best initial option, progressively advancing to KiTOM until all KiTOMI activities are allowed.”

Co-investigator, Aline Sardinha, PhD, also of the Federal University of Rio de Janeiro, noted that “Cardiac anxiety, the fear of cardiac-related stimuli and sensations, which are perceived as negative or dangerous, is common in heart patients and surely interfere with the resumption of a normal and regular sexual life.” The authors emphasize the importance of sexual counseling to provide reassurance and reliable information for patients and their partners, including the proper use of medications to treat erectile dysfunction.

Recommendations resulting from this study are summarized in the following Decision Tree, which evaluates the patient’s heart condition according to widely-accepted definitions, places the patient in one of three risk groups, and defines the advisable sexual activities for each group.



Putting these recommendations into perspective, the researchers equated various sexual activities with walking at different speeds, noting for example that orgasm is equivalent to a brisk walk across a street.

## Sexual Activity vs Walking Comparing efforts

<u>SEXUAL ACTIVITY</u>		<u>WALKING</u>
• Kissing or Touching	<div style="background-color: #d9e1f2; padding: 2px;">Exercise Intensity</div>	• Slowly
• Oral sex and Masturbation		• Regular pace
• Intercourse (initial/middle phases)		• Little bit faster
• Orgasm (10-30 seconds)		• Faster (as to cross a street)
• After orgasm		• Very easy pace

\* The intention is that the bar color represents the exercise intensity, with darker meaning more intense

“Professional sexual activity advice should be offered similar to advice regarding the return to work and enrollment in an exercise program,” emphasized Dr. Araújo. “KiT activities should be a component of positive sexual behavior toward a healthier sexual life and should be recommended for virtually all heart patients regardless of sexual orientation. Often considered ‘taboo,’ an objective discussion of sexual behavior in heart disease has often been put aside. Healthcare providers must break this vicious cycle.”

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#### **NOTES FOR EDITORS**

“Sexual Activity and Heart Patients: A Contemporary Perspective,” by Ricardo Stein, MD, DSc, Aline Sardinha, PhD, and Claudio Gil S. Araújo, MD, PhD (DOI: 10.1016/j.cjca.2015.10.010). The article appears online in advance of the *Canadian Journal of Cardiology*, Volume 32, Issue 3 (March 2016), published by Elsevier.

Full text of this article and editorial is available to credentialed journalists upon request. Contact Eileen Leahy at 732-238-3628 or [cjcmedia@elsevier.com](mailto:cjcmedia@elsevier.com) to obtain copies. Journalists who would like to interview the authors should contact:

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The *Canadian Journal of Cardiology* ([www.onlinecjc.ca](http://www.onlinecjc.ca)) is the official journal of the Canadian Cardiovascular Society ([www.ccs.ca](http://www.ccs.ca)). It is a vehicle for the international dissemination of new knowledge in cardiology and cardiovascular science, particularly serving as a major venue for the results of Canadian cardiovascular research and Society guidelines. The journal publishes original reports of clinical and basic research relevant to cardiovascular medicine as well as editorials, review articles, case reports, and papers on health outcomes, policy research, ethics, medical history, and political issues affecting practice.

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Editor-in-Chief Stanley Nattel, MD, is Paul-David Chair in Cardiovascular Electrophysiology and Professor of Medicine at the University of Montreal and Director of the Electrophysiology Research Program at the Montreal Heart Institute Research Center.

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