

## Editorial



# Sexual Health Issue in Adult Congenital Heart Disease to Improve the Quality of Life

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Indebted to improvement of diagnosis, medical and surgical treatment as well as catheter-based interventions, survival rate and life expectancy of patients born with congenital heart disease (CHD) has been increased dramatically and most of CHD patients grow up to adulthood.<sup>1)</sup> Nowadays the number of adult congenital heart disease (ACHD) has been increased and more than two thirds of CHD patients are adult patients, which resulted in expansion of ACHD fields.

Traditionally long-term follow-up of residual and/or sequelae of hemodynamical problem of CHD per se was main topic in ACHD, and management for co-morbidities related with aging and/or special problem for elderly ACHD patients has been developed over the past decades. With a growing cohort of ACHD patients now reaching adulthood, quality of life (QoL) and functional capacity have become an issue recently. Postoperative or unoperated CHD patients may encounter late complications such as heart failure, arrhythmic burden, thrombosis, pulmonary arterial hypertension, and anatomic lesions requiring repeated surgical or interventional treatment. In addition to CHD-related problems, aging related co-morbidities such as hypertension, dyslipidemia, diabetes mellitus, obesity among ACHD patients affect general health negatively for ACHD patients and make CHD-related treatment more difficult, and even increase the risk of coronary vascular disease.<sup>2)</sup> Treatment of elderly ACHD patients is also challenging. For example, transcatheter closure of atrial septal defect secundum has been the treatment of choice in most cases, but meticulous strategic approach in elderly group is required since masked left ventricle restriction and arrhythmic burden as well as previously mentioned cardiac and systemic co-morbidities may further complicate the procedure and influence negatively.<sup>3)</sup> These complex and interactive problems in combination affect QoL of ACHD patients diversely. Indeed, QoL consists of extensive scopes such as health related QoL, emotional states, physical functioning, mental health, adjustment to medical environment (coping with the disease, interactions with medical professionals), sexual and reproductive issues, social life, identity and so on. ACHD patients suffer from mental problems, psychosocial variables as well as health related problems according to the severity of their CHD,<sup>4)5)</sup> and several strategies are adopted to increase QoL among adolescent and adult CHD patients.<sup>6)</sup>

**Data Sharing Statement**

The data generated in this study is available from the corresponding author(s) upon reasonable request.

**Author Contributions**

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Sexual and reproductive health among ACHD patients is usually overlooked in clinical practice and research fields, but it is an important aspect of QoL and the sexual dysfunction is more prevalent than the conventional medico-social environment. Neiman et al.<sup>7)</sup> reported relative high prevalence of sexual dysfunction as high as 28% in ACHD patients, and sexual dysfunction is related with poor QoL in both men (poor mental health, feeling anxious, worried or tense, needing assistance, and inhibited activity of daily living) and women (report fewer days feeling health and energetic), but the sexual health assessment and counseling is rarely performed in ACHD clinical settings.<sup>8)</sup>

Fischer et al.<sup>9)</sup> reported a comprehensive study regarding sexual health among the ACHD patients. This questionnaire-based study reported that 43% ACHD patients suffered from more than mild ED in association with decreased sexual activity. The study also demonstrated that ACHD patients hesitated to discuss about sexual issues with their healthcare providers regardless of ED. This study also found some independent risk factors for ED as advanced age, presence of psychiatric disease, living alone, but could not find the association between medication for ACHD and ED, which might be due to the design of study which was questionnaire-based. The role of phosphodiesterase 5 inhibitors (PDE-5 inhibitors) is also less clear since the use of PDE-5 inhibitor was not clearly identified for either use of ED or pulmonary arterial hypertension. The association between medication and ED or sexual dysfunction require further study and the efficacy and safety of PDE-5 inhibitor for ED among ACHD patients with/without pulmonary arterial hypertension should also be established. Nevertheless, the study raised an “alarm” in sexual health issue among ACHD patients, which is “a prevalent but neglected issue” in a timely manner and requested for ACHD society to expand the fields of ACHD management.

Since the clinical characteristic and course of ACHD is diverse and complex, the management of ACHD require multidisciplinary team approach by health-care professionals from various background, social workers and even by patents/family self-help group to increase the survival of ACHD and to improve QoL. In addition, sexual and reproductive health should be assessed especially in patients with risk factors (advanced age, presence of psychiatric disease, living alone), and referred to a specialist accordingly. Ultimately, the recent ACHD guidelines included only the safety issue of pregnancy among high risk ACHD patients, but guideline including sexual health counselling should also be established.<sup>10)</sup>

**REFERENCES**

1. Hörer J. Current spectrum, challenges and new developments in the surgical care of adults with congenital heart disease. *Cardiovasc Diagn Ther* 2018;8:754-64.  
[PUBMED](#) | [CROSSREF](#)
2. Niwa K. Metabolic syndrome in adult congenital heart disease. *Korean Circ J* 2019;49:691-708.  
[PUBMED](#) | [CROSSREF](#)
3. Choi JY. Transcatheter closure of secundum atrial septal defect in patients over 60 years old. *Korean Circ J* 2013;43:80-1.  
[PUBMED](#) | [CROSSREF](#)
4. Bang JS, Jo S, Kim GB, et al. The mental health and quality of life of adult patients with congenital heart disease. *Int J Cardiol* 2013;170:49-53.  
[PUBMED](#) | [CROSSREF](#)
5. Karsenty C, Maury P, Blot-Souletie N, et al. The medical history of adults with complex congenital heart disease affects their social development and professional activity. *Arch Cardiovasc Dis* 2015;108:589-97.  
[PUBMED](#) | [CROSSREF](#)

6. Lee S, Kim S, Choi JY. Coping and resilience of adolescents with congenital heart disease. *J Cardiovasc Nurs* 2014;29:340-6.  
[PUBMED](#) | [CROSSREF](#)
7. Neiman A, Ginde S, Earing MG, Bartz PJ, Cohen S. The prevalence of sexual dysfunction and its association with quality of life in adults with congenital heart disease. *Int J Cardiol* 2017;228:953-7.  
[PUBMED](#) | [CROSSREF](#)
8. Huang S, Cook SC. It is not taboo: addressing sexual function in adults with congenital heart disease. *Curr Cardiol Rep* 2018;20:93.  
[PUBMED](#) | [CROSSREF](#)
9. Fischer AJ, Grundlach C, Helm PC, et al. Erectile dysfunction in men with adult congenital heart disease: a prevalent but neglected issue. *Korean Circ J* 2022;52:233-42.  
[PUBMED](#) | [CROSSREF](#)
10. Steinke EE, Jaarsma T, Barnason SA, et al. Sexual counselling for individuals with cardiovascular disease and their partners: a consensus document from the American Heart Association and the ESC Council on Cardiovascular Nursing and Allied Professions (CCNAP). *Eur Heart J* 2013;34:3217-35.  
[PUBMED](#) | [CROSSREF](#)