

CAG Repeat Polymorphism of Androgen Receptor and Female Sexual Functions in Egyptian Female Population

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Abstract : Background: Androgen receptor (AR) polymorphism in cytosine adenine-guanine (CAG) repeat has an effect on the functional capacity of AR in males. However, little researches in this field are available regarding female sexual function. Aim: To investigate the possible link between polymorphism in the CAG repeat of AR gene and female sexual function in a sample of the Egyptian population. Materials and methods: 500 Egyptian married females completed a questionnaire regarding sociodemographic, reproductive, and sexual data. AR CAG repeat length was analyzed for those having female sexual dysfunctions (FSD) using real-time PCR. Results: The most sensitive domain to AR CAG repeat length was the orgasm domain that showed significant positive correlations with short allele ($p=0.001$), long allele ($p=.015$), biallelic mean ($p=.000$), and X weighted biallelic mean ($p=.000$). The satisfaction domain had significant positive correlations with the biallelic mean ($p=.035$), and the X weighted biallelic mean ($p=.032$). However, the pain domain was of significant negative correlations with AR polymorphism of short allele ($p=.002$), biallelic mean ($p=.013$), and X weighted biallelic mean ($p=.011$). Conclusions: AR polymorphism could represent a non-negligible aspect in female sexual function. The lower AR CAG repeat polymorphism was of significant impact on FSD, affecting mainly female orgasm followed by pain disorders that finally reflected on her sexual satisfaction.

Keywords : female sexual dysfunction, androgen receptor, CAG repeat polymorphism, androgen

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