AB081. Biallelic and triallelic 5-HTTLPR polymorphisms and their relationship with lifelong premature ejaculation: a case-control study from a Chinese population

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Background: The study aimed to explore the relationship between premature ejaculation (PE) and the serotonin transporter gene-linked polymorphic region (5-HTTLPR) with respect to the biallelic and triallelic classifications.
Methods: A total of 115 outpatients who complained of ejaculating prematurely and were diagnosed as lifelong premature ejaculation (LPE) and 101 controls without PE complaint were recruited. All subjects completed a detailed questionnaire and were genotyped for 5-HTTLPR polymorphism using PCR-based technology. Associations between 5-HTTLPR allelic and genotypic frequencies and their association with LPE, and the intravaginal ejaculation latency time (IELT) of different 5-HTTLPR genotypes among LPE patients were evaluated.
Results: The patients and controls didn't differ significantly in terms of any characteristic except age. The results showed no significant difference regarding the biallelic 5-HTTLPR. According to the triallelic classification, no significant difference was found comparing the genotypic distribution (P=0.091). However, the distribution of the S, LG and LA alleles in the cases was significantly different from the controls (P=0.018). We found a significantly lower frequency of LA allele and higher frequency of LG allele in patients. Based on another classification by expression, we found a significantly lower frequency of the L/L genotype (OR =0.37; 95% CI: 0.15–0.91, P=0.025) in patients with LPE. No significant association was detected between IELT of LPE and different genotypes.
Conclusions: Contrary to the general classification based on S/L alleles, triallelic 5-HTTLPR was associated with LPE. Triallelic 5-HTTLPR may be a promising field for genetic research of PE to avoid false negative results in future studies.
Keywords: Premature ejaculation (PE); 5-HTTLPR; biallelic polymorphism

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