

**Associations of OPRM1 A118G Gene Polymorphism with  
Pain Sensitivity and Opioid Dosage of Patients  
with Postherpetic Neuralgia**

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**KEYWORDS** Gene. Herpes Zoster. Opioid. Pain. Polymorphism

**ABSTRACT** This study aimed to explore the associations of OPRM<sub>1</sub> A118G gene polymorphism with pain sensitivity and opioid dosage of patients with postherpetic neuralgia (PHN). According to the 3-month follow-up results, 103 PHN patients were enrolled as a PHN group, and 112 without PHN after herpes zoster were included as a non-PHN group. The factors affecting PHN occurrence were subjected to one-way analysis of variance and multivariate logistic regression analysis. The frequency distribution of GG, AG and AA genotypes in both PHN and non-PHN groups conformed to the Hardy-Weinberg equilibrium law ( $P>0.05$ ). Initial treatment duration of more than 72 hours, severe acute pain and genotype GG were independent risk factors for PHN. Genotype GG exhibited significantly increased distribution frequency in mild, moderate and severe PHN groups. The 48-hour opioid dosage was highest in the patients with genotype GG ( $P<0.05$ ). OPRM<sub>1</sub> A118G gene polymorphism causes individual differences in the pharmacodynamics of opioids in PHN patients.