

## **COMTval158met Gene Polymorphism Correlation with Prenatal Anxiety and Labor Analgesia**

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**ABSTRACT** This study investigates the correlation between COMTval158met gene polymorphism and prenatal anxiety and labor analgesia. Venous blood of 97 pregnant women was collected for the COMTval158met gene polymorphism analysis through reaction-restriction fragment length polymorphism method. Habitat modification score (HMS) and The Symptom Checklist-90 (SCL-90) was applied to analyze the maternal anxiety status 1d before labor. The pain threshold and pain tolerance threshold were measured by Pain Threshold Machine. The average age, body weight, and gestational age among the three groups had no statistical difference ( $P>0.05$ ). Habitat modification score and Hamilton Anxiety Rating Scale (HAM-A) score varied significantly between groups ( $P>0.05$ ). The anxiety value, pain threshold, and pain tolerance were significantly different among groups ( $P>0.05$ ). The polymorphism of the COMTval158met gene can affect maternal pain sensitivity and tolerance, which is associated with maternal antenatal anxiety and labor analgesia.