

Predictors of idiopathic thrombocytopenic purpura in pregnant women presenting with thrombocytopenia

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Objective : Idiopathic thrombocytopenic purpura (ITP) and gestational thrombocytopenia (GT) are the most common causes of thrombocytopenia during pregnancy. Despite an ever-increasing body of experience with these disorders, differentiation between the two entities still remains a diagnostic challenge in obstetrical settings. The current study attempted to identify the antenatal predictors of ITP for pregnant women, and to assess the diagnostic value of these indicators.

Methods : Between January 1999 and June 2005, a total of 58 pregnant women with a presumptive diagnosis of either ITP or GT were consecutively recruited for the study. All of the patients had platelet counts of less than $100 \times 10^9/L$ during pregnancy. The predictors of ITP were evaluated by comparison between the two disorders.

Results : From the analysis, platelet counts at each time point of pregnancy and gestational age at presentation were found to correlate with ITP. On multivariate analysis, the detection of thrombocytopenia prior to 28 weeks of gestation and platelet counts $< 50 \times 10^9/L$ at its diagnosis remained independently predictive of ITP ($P < 0.001$ and $P = 0.004$, respectively). The combined analysis of these two factors provided a 96.0% sensitivity and a specificity of 75.8%.

Conclusion : The onset time of thrombocytopenia and platelet count at its presentation remain the strongest predictors of ITP for pregnant women. A model using the combination of these factors may be useful for the early prediction of ITP in pregnant women, offering an excellent sensitivity and specificity.