

Application of the perfusion index in obstetric bleeding.

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OBJECTIVE: We assessed the utility of the pulse oximeter perfusion index (PI) in maternal monitoring immediately after delivery.

METHODS: We examined 30 pregnant women without any complications using the Rad7 device at delivery. The correlations between heart rate (HR), systolic blood pressure (BP), oxygen saturation SpO₂, PI, Pleth variability index (PVI), shock index and blood loss were assessed.

RESULTS: Blood loss at 20-min postpartum was not correlated with the difference in heart rate, systolic BP, SpO₂, shock index or PVI taken immediately after delivery and at 20-min postpartum, but showed a strong negative correlation with the difference in the PI taken immediately after delivery and at 20-min postpartum ($r = -0.70$).

CONCLUSION: PI changes were correlated with post-delivery blood loss and can be used for maternal monitoring at delivery.