

## **Perfusion index and pleth variability index in the first hour of life according to mode of delivery**

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Perfusion index (PI) is a relative assessment of the pulse strength at the monitoring site. The plethysmographic variability index (PVI, pleth variability index) is a noninvasive and continuous measure of the dynamic change in PI that occurs during respiratory cycles. In this study PI and PVI changes were compared in babies born with cesarean section (C/S) or spontaneous vaginal delivery (SVD); 125 healthy term infants were monitored with pulse oxymeter after first ten minutes of life. Data were recorded from this monitor on a personal computer and analyzed by generalized estimating equations (GEE) method. Pulse rate was lower in babies born via SVD. Perfusion index were higher in C/S group. Pleth variability index were higher in C/S group. Higher pulse rate, PI and PVI values in babies born via C/S may be indicative of more significant hemodynamic changes in these infants during early transitional period after birth.