

Plasma antioxidant activities during human fetal development

Michał Józwiak, Zbigniew Kłubowicz, Marcin Józwiak, Grażyna Sajewska, Adam Śledziewski, Jolanta Żak, Jan Urban

The aim of present study was to investigate AOA in umbilical cord blood plasma samples taken from newborns at different gestational age. Antioxidant activity in plasma samples, expressed as percentage of peroxidation inhibition was calculated using the difference in MDA level as measured before and after incubation. Assessing our results it may be arbitrarily accepted that approximately 85% of normal term neonates had moderate and high plasma AOA. All AOA values in the subgroup of premature infants were low, as compared to term babies. Our findings support the view that low AOA level in plasma is associated with both prematurity and relevant fetal weight deficit.