Objective: study in vivo fetal-maternal exchanges iron.
Methodology: The study focused on 30 mothers scheduled for prophylactic cesarean section in the central maternity of TEBESSA between January and April 2014. The blood test was taken from the vein's mother and from the umbilical vein and artery in order to test the serum iron, ferritin and hemoglobin.
Results: the average volume of mothers hemoglobine is 10,56g/dl ± 1,38, the volume of the serum iron is 61,37µg /dl ± 24,46, the volume of ferritin is 15,95 ng/ml ± 13,37. Fetal side, the volume of hemoglobine in the umbilical vein is 14, 32 g/dl±1,55, the volume of the serum iron is 124,24 µg /dl ± 36,80 , ferritin is 107,20 ng/ml ± 66,26. The Maternal serum iron is the difference of umbilical veno-arterial (r = 0.4, p < 0.05). Maternal ferritin is also connected to the umbilical vein (r = 0.37, p < 0.05).
Conclusion: The fetal-maternalexchange of iron are highlighted, the fetal iron store is enriched by native ferritin.
Keywords: Iron, ferritin, mother, fetus, fetal-maternal exchanges.