## Summary

Neonatal sepsis is one of the most challing problems despite the ongoing progress in diagnosis and treatment.

This study aimed to evaluate apolipoprotein A in late onset neonatal infection diagnosis.

## The study include 50 neonates divided in 2 groups:

- Group 1: which included neonates diagnosed as having late onset neonatal sepsis based on clinical and laboratory data (30 neonates).
- Group 2: , which included apparently healthy neonates with no clinical signs and no laboratory data of sepsis (20 neonates).

Neonates with early onset sepsis, congenital anomalies, congenital infection and perinatal asphyxia were excluded.

All neonates were subjected to full history taking, physical examination, complete blood count and C-reactive protein together with blood culture to the septic group.

Estimation of level of Apolipoprotein A in serum by quantitative determination on the day 0 of diagnosis and day 4, only 1 blood sample form healthy control.

The results revealed that septic neonates (30 cases) showed significantly lower percentage of apolipoprotein A when compared to non septic neonates (20 cases).

According to this study the sensitivity and specificity were 96.7% and 95% respectively to Apo A.

**In conclusion**, the usage of apolipoprotein A as a marker for diagnosis of late onset sepsis proved to be valuable .