Lactic Dehydrogenase, a biochemical marker to predict foetal outcome in pregnancies complicated by Intrauterine Growth Restriction

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Introduction

- Lactate Dehydrogenase catalyses the reversible oxidation of lactate to pyruvate at final steps of glycolytic pathway and is a marker of acute inflammation in body fluids. Am J Obstet Gynecol 1989;23(4):506-506

Methodology

- Study Type: Prospective analytical case control study
- Study period: From June 2008 to March 2009
- Place of study: Department of Maternal and Reproductive Health (GCMM), & Department of Obstetrics & Gynecology, KG MU, Lucknow, U.P. India

- Inclusion criteria:
  - Pregnant mothers at third trimester were grouped under 2 categories.
  - Those with normal fetal growth parameters
  - Those with restricted fetal growth
- Exclusion criteria:
  - Pregnant mothers with S/S of pre-eclampsia
  - Pregnant mothers with possible genetic cause

Selection

- 200 pregnant women were recruited and matched for age, parity, and their demographic features, in their third trimester of pregnancy.
- Their serum samples were analysed for LDH levels.
- Statistical analysis was done using chi sq. test, Students t test and Fishers test. Cut of values were found using regression curves for good sensitivity and specificity.

Birth weight vs LDH levels

- Maternal serum LDH levels are significantly raised in the study group.
- Increased levels are associated with increasing severity of the condition.
- Fetal morbidity is increased with increase in levels of serum LDH

Observations

- Maternal serum LDH levels are significantly raised in the study group.
- Increased levels are associated with increasing severity of the condition.
- Fetal morbidity is increased with increase in levels of serum LDH

Conclusion

- Pregnancy complicated by intrauterine growth restriction is a challenge for an obstetrician. The foetal outcome is largely dependent on maternal events. Hence, markers for assessment of prognosis become a necessity in these conditions. LDH seems to be an important marker in such scenario.

REFERENCES