

CALIFORNIA STATE SCIENCE FAIR 2003 PROJECT SUMMARY

Name(s)

Brandon Mendoza

Project Number

S1008

Project Title

Fetal Lung Maturity: Maternal Diabetes' Impact on Lamellar Body Count

Abstract

Objectives/Goals

The goal of this project was to compare a fetal lung maturity test, lamellar body counts (LBC) in diabetic and non-diabetic pregnancies.

Methods/Materials

The experiment involved testing amniotic fluid samples on the Bayer Advia-120 hematology analyzer. A non-diabetic control for each identified diabetic case was selected by matching gestational age.

Results

There was no statistically sgnificant difference of the LBC between diabetic and non-diabetic cases over the gestational ages studied. (32-39 weeks).

Conclusions/Discussion

This experiment supports the hypothesis that LBC does not vary between diabetes and nondiabetes cases during pregnancy.

Summary Statement

Comparing fetal lung maturity testing in diabetic and non-diabetic pregnancies.

Help Received

Used the lab instruments at Sharp Memorial Hospital under the supervision of the supervisor Darlynn Lafler, MT (ASCP); help with statistical analysis from Deb Poelter, RN, PhD, research nurse at Sharp Mary Birch Hospital for Women; Mother and Father helped type report; Dr. Susan Domanico, AP