TO: Clients of URMC Labs

FROM: Richard K. Miller, PhD
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RE: Important Changes: Fetal Lung Maturity Profile and Delta OD 450 Bilirubin Assay on Amniotic Fluid

DATE: February 27, 2012

I am writing to inform you that the URMC Clinical Laboratory will no longer be providing the Abbott TDxFLx Fetal Lung Maturity assay since the reagent is no longer available from the manufacturer as of 3/1/2012. In its place the laboratory will be offering the Lamellar Body Count (LBC) which will be provided on a 24/7 basis. To order this test on amniotic fluid, please request a "Fetal Lung Maturity Profile". See attached memo for details about the reporting of results and interpretation.

The Delta OD 450 Bilirubin Assay on Amniotic Fluid will no longer be run in-house effective 3/1/2012. The sample will be sent out to a reference laboratory on a Mon-Fri basis during the hours of 8am-4pm and on Sat from 8-11am.
Memorandum
Concerning
FETAL LUNG MATURITY PROFILE -
Amniotic Fluid – Lamellar Body Count Assay
Replaces TDX-FLM

Strong Health (Strong Memorial Hospital Obstetrical Clinical Chemistry Laboratory)
Telephone: 585 273 2854

The current test for fetal lung maturity (TDX-FLM II) is no longer available from the manufacturer. We are switching the Lamellar Body Count Assay (LBC) to assess Fetal Lung Maturity and modifying slightly how we use our Fetal Lung Maturity Profile testing.

Because of the experience with use of the LBC in the international community since the 90s and the fact the LBC measures both size and number of lamellar bodies, we propose the following plan:

**Fetal Lung Maturity Profile (FLMP) Testing**

1. Order FLMP (Lamellar Body Count (LBC); Phosphatidylglycerol (PG))
2. First - LBC - Rapid, cost effective, 24/7 with limitations:
   a. Meconium contamination
   b. Blood (RBC) contamination
   c. Mucous contamination
   d. Chorioamnionitis
3. Result >50 THOU/ul - Fetal Lungs should be mature.
   No Follow up of PG unless specifically ordered by physician after result is reported.
4. Result 15 – 49 THOU/ul - Reflex order of PG.
5. Result <15 THOU/ul – Consider FLMP at later date; however, therapies should be considered. No PG ordered.
6. LBC Specimen Rejected If the LBC can not be performed based upon limitations, PG will be performed.

Thus, only a Fetal Lung Maturity Profile (FLMP) will be ordered. Simply ordering the Fetal Lung Maturity Profile will allow the LBC to be performed first 24/7 (as long as there is no contamination of the amniotic fluid specimen) with the ordering of the PG dependent upon the result of the LBC as noted above. If an LBC cannot be performed, then the PG will be performed between 8 AM and 3:30 PM.

This expanded availability of the FLMP with the addition of the LBC to 24/7 and analysis of a PG when necessary based upon the LBC result should improve care to our patients on both an outpatient and inpatient basis throughout the Finger Lakes Region.

Eva Pressman, MD
Director,
Maternal Fetal Medicine,
Professor of Obs/Gyn
Date: 31 January 2012

Richard K. Miller, PhD
Assistant Director,
SMH Clinical Laboratories
Professor of Obs/Gyn and of Pathology & Clinical Laboratory Medicine
References:


DeLuca et al, Influence of Glycemic Control on Fetal Lung Maturity in Gestations Affected by Diabetes or Mild Hyperglycemia Acta Ob e Gyn 88:1036-1040.


