The significance of B-HCG and vaginal cervicometry in predicting preterm delivery

Objective: the aim of the present study was to determine, in addition to endovaginal cervicometry, whether B-HCG detected in cervicovaginal secretions of patients at $\gamma_{A-\gamma} \varepsilon$ weeks' gestation with signs and symptoms of preterm labor is a predictor for preterm birth (- $\gamma\gamma$ weeks' gestation).

Study design: A prospective observational study of pregnant women with threatened preterm labor between γ_A and γ_{ξ} weeks gestation.

The study population consisted of patients admitted to causality unit in the department of obstetrics and gynecology, Kasr E; Aini Faculty of medicine, Cairo University, Cairo, Egypt between December $7 \cdot \cdot \xi$ to January $7 \cdot \cdot 7$ with signs and symptoms of preterm labor and intact membranes.

One hundred and three patients satisfied the inclusion criteria and were screened with bed side qualitative hCG assay and transvaginal cervicometry and subsequently with a qualitative hCG assay. Then digital examination of the cervix was performed and bishop scores were assessed. All samples were obtained prior to the administration of tocolytic therapy, refrigerated at $-\gamma \cdot \circ C$, and assayed within $\gamma \gamma$ hrs. The primary outcome of the study was the success of stopping labor for at least $\gamma \gamma$ hours after stopping of tocolytic drug.

Results: Qualitative and quantitative hCG results were obtained for all patients enrolled. The mean gestational age at sampling was (1) weeks; combined qualitative hCG and cervical length revealed sensitivity and specificity of (1), (

Conclusion: Qualitative measurement of hCG concentration from cervicovaginal secretions does not require additional instruments and may be easily and cheaply performed at the bed side. Transvaginal ultrasound cervical measurement is a safe and effective technique to predict increased risk preterm delivery in selected patients and normal results can help avoid unnecessary interventions. Combining the qualitative hCG testing with cervical length will get benefit of the higher sensitivity of cervical length and the higher specificity of hCG testing in accurately predicting preterm labor.