POB 08

Role of Phosphorylated Insulin-like Growth Factor Binding Protein-1 (pHIGFBP-1) in Prediction of Preterm Delivery

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Objective: To determine the efficacy of pHIGFBP-1 (Actim Partus) as a routine bedside test in patient with preterm labour

Design: Prospective observational controlled study.

Setting: Low Risk Centre, Hospital Tengku Ampuan Afzan, Kuantan, Pahang.

Material and Method: Pregnant ladies at gestation between 32W and 35W + 6D whom presented to Low Risk Centre with premature labour (persistent contraction pain accompanied by progressive cervical dilatation and effacement). A pHIGFBP-1 bed-side test will be done to all suitable patients who fulfilled the inclusion criteria. Those with a positive test will receive 2 doses of antenatal corticosteroids and tocolysed with oral Nifedipine as per local protocol and those with negative test will received 2 doses antenatal corticosteroids without tocolysis. The time frame (interval) of delivery after the first presentation will be observed. The outcome of the babies was also observed.

Result: higher parity, os dilatation and cervical effacement were not the determinant factors in determination of positive result for pHIGFBP-1 test. The bed-side pHIGFBP-1 test has a low sensitivity of 0.70 but with specificity of 0.83 in predicting a preterm delivery within 48 hours. In addition its positive predictive value (PPV) is 0.16 and negative predictive value (NPV) of 0.98. The outcome of the babies were also good in which majority of them delivered beyond 36 weeks of gestation, 83.3% (p=0.014)

Conclusion: The pHIGFBP-1 bed-side test has a very good negative predictive value. It is reliable and promising test in which it assists in early detection and diagnosis of preterm labour