

Abstract

Predicting Preterm Labour: Evaluation Of Insulin-Like Growth Factor Binding Protein-1 As A Bedside Test

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Objective:

To evaluate the efficacy of a bedside kit for phosphorylated insulin like growth factor binding protein-1 (IGFBP-1) in the diagnosis of preterm labour and the prediction of subsequent preterm delivery and also to implement the usage of the kit in the district hospitals in Sabah to reduce health care costs.

Methods:

A prospective study was carried out over the period of 6 months from 1st of January 2012 till 31st May 2012 at the Maternity ward/ Patient Admission Centre of O&G, Kota Marudu Hospital. All women admitted with suspected preterm labour between 28 and 37 weeks with contractions of at least 1 in 10 minutes lasting at least 30 seconds and did not have any of the exclusion criteria were recruited. The bedside Actim Partus test was carried out according to manufacturer's instructions. The result of the test was blinded to the attending physician, therefore, subsequent management of the patient was regardless of the test result. Patients were followed up for 7 days after that to determine if they went into labour or not.

Results:

50 patients were recruited in the study but 44 were only included. 39 of them tested negative and 5 tested positive. Out of the 39 who tested negative, 6 delivered within 7 days. Out of the 5 who tested positive, 3 delivered within 7 days. The sensitivity, specificity, positive predictive value and negative predictive value were 33%, 94%, 60% and 85% respectively in predicting delivery within 7 days.

Conclusion:

The bedside Actim Partus test has a very high specificity and negative predictive value in predicting preterm labour within 7 days of presentation. It can be used in the local setting to help decide which patients are at risk of preterm labour and thus require transfer to a centre with neonatal facilities.