Value of serum progesterone, β-HCG level in the diagnosis of ectopic pregnancy

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View from specialist: It is creative, and of certain scientific and educational value.

[ABSTRACT] Objective: To explore the diagnostic value of serum progesterone, HCG in early diagnosis of ectopic pregnancy. Methods: Blood progesterone, β-HCG level of 120 cases of confirmed ectopic pregnancy patients that were admitted to our hospital during Jan. 2009.1 and Jan. 2010 (ectopic pregnancy group) were detected with radiation immune method (RIA). Eighty-six patients diagnosed as threatening miscarriage (threatening miscarriage group) and 72 cases of unavoidably abortion (unavoidably abortion groups) were also enrolled for comparative study. Results: The serum progesterone level of the ectopic pregnancy group was significant lower than the other two groups (P<0.05). Significant difference in β-HCG value was observed between the ectopic pregnancy group and the threatening miscarriage group (P<0.05), but no similar results was observed between the ectopic pregnancy group and the unavoidably abortion group (P>0.05). Of all cases that showed 50% or more increase in serum beta HCG value after 48 h 10.3% were from the ectopic pregnancy group, while the other 89.7% were cases of the threatening miscarriage group. On the other hand, of those showed 50% or more decline in serum beta HCG value, 82.8% were from the unavoidably abortion group, and 17.2% were cases of the ectopic pregnancy group. Conclusions: Serum progesterone detection is simple, efficient and can be used for early diagnosis of ectopic pregnancy. Determination of beta HCG level 48h later can help to differentiate ectopic pregnancy from other similar disease.

[KEY WORDS] Progesterone; Human gonadotropins; Ectopic pregnancy; Threatening miscarriage; Unavoidably abortion