CULDOCENTESIS IN DIAGNOSIS OF DISTURBED ECTOPIC PREGNANCY STILL A USEFUL PROCEDURE IN DEVELOPING COUNTRIES

ABSTRACT
Over a period of 5 years culdocentesis was carried out in 156 cases of suspected ectopic pregnancy using needle aspiration through the pouch of Douglas. The result was positive in 134 cases, with 131 being true positive and 3 false positive. In 22 cases the result was negative, 6 of which were false negative. It is concluded that culdocentesis is an effective method of diagnosing disturbed ectopic pregnancy (JPMA 42: 5, 1992).

INTRODUCTION
Ectopic pregnancy, a clinical diagnosis in majority of cases is infrequently seen in our hospital. Since it can present with varied symptoms, diagnosis can be difficult in some cases. To increase the accuracy rate of preoperative diagnosis in suspected cases of ectopic pregnancy, various diagnostic procedures have been employed over the years. The purpose of this study was to evaluate the efficacy of culdocentesis for the diagnosis of ectopic pregnancy.

PATIENTS AND METHOD
The present study included 156 suspected cases of ectopic pregnancy admitted to the Department of Obstetrics and Gynaecology between January, 1985 to December 1989. Culdocentesis was done in the operating theatre under aseptic precautions with or without general anaesthesia depending on the certainty of the diagnosis. Urinary bladder was catheterized and gentle bimanual vaginal examination was done to confirm the previous vaginal findings. Sims speculum was introduced in the vagina and posterior lip of cervix was held gently with a Vulsellum forceps, pulled upwards and forwards exposing the posterior fornix. An 18 gauge needle, 10 cms longwas introduced per vaginum posteriorly through the pouch of Douglas whilst putting it on stretch and aspiration performed by a 10 ml syringe. Aspiration was considered positive when fresh blood, altered dark blood or tiny dark clots were obtained. Negative aspiration was labelled when there is no aspirate or when clear fluid or pus was obtained.

RESULTS
Of 156 patients undergoing culdocentesis, positive results were obtained in 134 cases. Of these 131 were true positives, confirmed at immediate laparotomy while 3 were false positive. At laparotomy one was found to have a ruptured chocolate cyst and there was bleeding from ruptured corpus luteal cysts in two. In 22 patients the results were negative, 16 were true negative and 6 false negative. These false negative patients were sent back to the ward for further investigations. The symptoms became worse, hence repeat culdocentesis within 48 hours was done in 6 cases, 4 showed positive results but 2 were still negative, for which laparoscopy was carried out. Dark blood of ruptured ectopic pregnancy
was seen and at laparotomy ruptured ectopic was found in all of these cases. The specificity of the test was 97.8% and sensitivity 95.6%.

DISCUSSION

Culdocentesis has been given up as a diagnostic procedure in most of the world particularly in the West, since the advent of laparoscopy, sensitive and rapid tests and pelvic ultrasound. These investigations are established methods for the diagnosis especially of undisturbed ectopic pregnancy. In developing countries, where financial constraints prevail with a busy workload, these investigations are available but not convenient. They are expensive, time consuming and require expertise. An alternative method is culdocentesis. Early diagnosis and early operation with adequate blood replacement lowers mortality. A careful history and pelvic examination is very important for the diagnose of ectopic pregnancy. The patients with negative results were observed and investigated for other causes. Immediate laparoscopy was not resorted to as clinically the symptoms were not highly suggestive of ectopic pregnancy. Two cases with repeat needleing were still negative because previous adhesions had prevented the needle to go high up and the blood was loculated. Of the 3 positive for ectopic pregnancy 2 were in fact so because of haemoperitoneum due to bleeding from ruptured corpus luteum. Only one was a true positive. There were no complications from the procedure. Culdocentesis was found safe and reliable. It is inexpensive, easily performed with minimal morbidity and still has a definitive value in diagnosing disturbed ectopic pregnancy.

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REFERENCES