Medical treatment of ectopic pregnancy by methotrexate versus other modalities of treatment

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Ectopic pregnancy is an issue that plagues women's health, and is a significant cause of maternal mortality. A clear understanding of the contributing factors responsible for E. P. and of effective modern methods for their earlier diagnosis is essential. There are so many etiological factors of ectopic pregnancy that act as a mechanical factors as tubal stenosis due to P.I.D caused by chlamydia and other variable organism, peritubal adhesions and previously induced abortion. Functional factors as external migration of the ovum, hormonal changes and new advents of ART (IVF, GIFT, and ZIFT), endometriosis, also failed contraception was found to be an important cause of ectopic pregnancy. Secondly, there has been a major break through in the various investigatory methods used in the diagnosis of ectopic that include: more sensitive beta subunit human gonadotrophin assays, ultrasonographic machines with higher resolution as well as the introduction of the transvaginal ultrasonic approach. New techniques and diagnostic modalities in pelvic and vaginal U/S recently have excellent results in the diagnosis of ectopic pregnancy using vaginal color and pulsed Doppler U/S and so the need for invasive tests such as endometrial curettage and culdocentesis has decreased dramatically, while laparoscopy remains the standard, the best invasive procedure for diagnosis of an ectopic pregnancy. Finally the increased experience in laparoscopy gained by most gynecologists as well as the advancement in laparoscopic techniquesSummary and Conclusion-83-over the years lead to decreased maternal mortality. The main aim of recent trends in treatment of ectopic pregnancy is preserving reproductive function. Medical treatment was introduced by Tanaka in 1983 when hesucceeded for the first time in treating a case of tubal pregnancy withmethotrexate. Medical treatment for residual tissue after the removal ofthe ectopic gestation procedure however was mentioned before this forthe acceleration of resorption of the placenta that is left in the patient incases of abdominal pregnancy where the placenta could not be removed. Methotrexate is the main drug in the line of treatment of ectopic pregnancy. Many protocols exist for this drug and a single dosemethotrexate regimen has been reported with excellent results. A variety of other drugs have been described including; Actinomycin D, the antiprogesteroneagent RU 486 and trichosanthin, yet these drugs have nevergained the glamour of methotrexate. The forerunner of medical treatment is methotrexate, a folic acidanalogue, which induce tubal abortion or dissolve a proliferating

ectopicpregnancy instead of employing surgical intervention, and isadministered either systemically (1M, IV and Orally) or locally. IMinjection of MTX appeared as an attractive alternative to laparoscopy forthe treatment of UEP because of its high efficacy, its simplicity and itscost-effectiveness. On other hand, single-dose MTX did not appear to besatisfactory in some cases. The use of MTX, whose aim is to treat UEPwithout sophisticated equipment, anesthesia, surgery dramaticallyreduced the morbidity and cost related to the treatment.Pre-treatment B-hCG levels appeared as strong prognostic factorfor MTX effectiveness. Selection of patients is mandatory to guaranteeSummary and Conclusion-84-high success rates with a short follow up. UEP with β-hCG level