

The value of ultrasonography in the diagnosis of ectopic pregnancy at the Kenyatta National Hospital, Nairobi.

Abstract:

Over a six-month-period, from 1st March 1988 to 30th September 1988, 127 patients suspected of having ectopic gestation at the Kenyatta National Hospital (KNH) were referred for sonographic examination, of whom 100 (78.7%) had enough data for a final diagnosis. During sonography, ectopic pregnancy was diagnosed in 31 (31%) patients, out of whom 15 (48.4%) were confirmed to have ectopic gestation at laparotomy. Of the 69 who were thought to have other gynaecological disorders at sonographic examination, 2 (2.9%) were later found to have other ectopic gestation at surgery. Of the 17 patients who had ectopic gestation finally, extrauterine gestational sac with a demonstrable foetal pole were observed in only 6 (35.3%) cases, thus allowing a confident diagnosis of ectopic pregnancy by sonography. An empty, bulky uterus, demonstrable adnexal mass, pseudo-gestational sac and fluid in the culde-sac, together improved the sonographic positive predictive value to 67.0%. This study has shown that sonography can be used in the diagnosis of ectopic pregnancy at the KNH. However, in order to improve its reliability, further studies are recommended involving a combination of pregnancy test and sonography.

PIP: Between March and September 1988 at the Kenyatta National Hospital in Nairobi, Kenya, clinicians included all patients (127) referred for ultrasonography due to suspected ectopic pregnancy (age range, 18-45 years) in a study to determine whether ultrasonography can be used to accurately diagnose ectopic pregnancy. The researchers examined only the records of 100 patients who had data adequate enough to make a final diagnosis. Based on sonography, clinicians believed 31 women had an ectopic pregnancy, but laparotomy confirmed that just 15 (48.4%) of these women actually had an ectopic pregnancy. Based on sonography, they did not suspect ectopic pregnancy in the other 69 patients, but laparotomy revealed that 2 patients (2.9%) did indeed have an ectopic pregnancy. Thus, the overall ectopic pregnancy rate among the 100 women was 17%. The remaining 83 women had other gynecological conditions. 52.9% of the women with an actual ectopic pregnancy had a pseudogestational sac, which had a positive predictive value of 53% and a negative predictive value of 90%. A pseudogestational sac had a sensitivity of 53% and specificity of 90%. Just 6 ectopic pregnancy cases (35.3%) had an extrauterine gestational sac with a clear fetal pole and a fetal heart beat. An enlarged uterus was more common in women with an ectopic pregnancy than in those with other conditions (82.4% vs. 51.8%; $p .05$). Every ectopic pregnancy case had a complex adnexal mass compared to just 48.2% of those with other conditions ($p .001$). When a woman had all these conditions combined--an empty, enlarged uterus; distinct adnexal mass; a pseudogestational sac; and fluid in the cul-de-sac--sonography's positive predictive value increased to 67%. The researchers recommended additional studies using a combination of the urinary pregnancy test and sonography to improve sonography's reliability.