

Role of transverse uterus sign in diagnosis of stage I and II uterine prolapse on transabdominal ultrasound

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Abstract

Background: To describe a new diagnostic tool in diagnosis of stage I and II uterine prolapse on transabdominal ultrasound. **Methods:** 100 asymptomatic patients were included in the study; in which transverse uterus sign was positive on ultrasound. **Result:** It was found in our study that transverse uterus sign is a good indicator of stage I and II uterine prolapse on transabdominal ultrasound. The specificity and sensitivity of transverse uterus sign in diagnosing uterine prolapse was 100 % and 100 % respectively.

Key Word: Transverse uterus sign, uterine prolapse.

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INTRODUCTION

Uterine prolapse is descent of uterus into vagina. Uterine prolapse can be associated with cystocele and rectocele. It occurs due to laxity of ligaments in pelvic floor. It is seen commonly in multiparous. In stage I and II uterine prolapse, cervix/part of uterus is seen in vaginal cavity i.e. posterior to urinary bladder. In stage III uterine prolapse, some part of uterus is seen outside vagina. In stage IV uterine prolapse; entire uterus is seen outside vagina. Stage III and IV uterine prolapse are easily recognised by patient and gynaecologist; whereas stage I and II are asymptomatic and are easily missed. Transverse uterus sign is a new sign for diagnosis of early uterine

prolapse in asymptomatic patients. It is seen when patient is in full bladder. In normal female, uterus is seen in anteverted/retroverted/retroflexed position. Only vagina is seen posterior to urinary bladder on transabdominal ultrasound. The cervix/fundus and body of uterus is never seen posterior to an adequately distended urinary bladder. If the cervix/part of uterus is seen in transverse position posterior to adequately distended urinary bladder on transabdominal ultrasound then it signifies stage I and II uterine prolapse. This transversely placed uterus on transabdominal ultrasound is known as “transverse uterus sign” In stage III uterine prolapse, only part of uterus is visualised in distal part of vagina on ultrasound. Rest of the uterus is not visualised at all. In stage IV uterine prolapse; no part of uterus is seen on ultrasound. Picture is same as seen in hysterectomy patients

AIMS

The aim of current study is to determine the role and value of transverse uterus sign as a new diagnostic tool in diagnosis of stage I and II uterine prolapse on transabdominal ultrasound.

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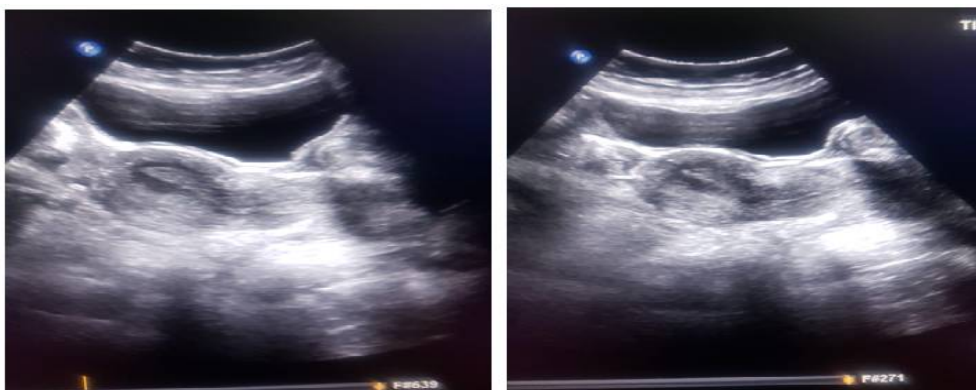
MATERIAL AND METHOD

All the patients were examined by trans abdominal ultrasound with full bladder and the findings were confirmed by transvaginal examination by gynaecologist. Convex probe was used. Patients with over distended and empty bladder were excluded from the study. Diagnostic accuracy was measured.

RESULTS

All these 100 patients had radiological feature of stage I and II uterine prolapse on trans abdominal ultrasound.

Four patients had false positive result due to over distended urinary bladder. Age distribution was between 22 to 47 years with mean age of 33 years. On transabdominal ultrasound, cervix or part of uterus was seen posterior to distended urinary bladder in all these patients. 62 of these patients admitted that during squatting, some flesh like mass was felt within vaginal cavity. In all these 100 patients the diagnosis of uterine prolapse was made on basis of trans abdominal ultrasound i.e. the clinician and patient were unaware of uterine prolapse.



CONCLUSION

It was found in our study that transverse uterus sign on trans abdominal ultrasound is good indicator of stage I and II uterine prolapse. Because of this new diagnostic tool “transverse uterus sign” we were able to diagnose uterine prolapse in clinically unsuspected cases. As in our study, the clinician had not suspected uterine prolapse and the patients were sent for different complain. In all these cases, the specificity and sensitivity of our new diagnostic tool i.e. transverse uterus sign on transabdominal ultrasound with adequately distended urinary bladder was 100 %.

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