

PREVALENCE OF UTERINE AND ADNEXAL INCIDENTALOMAS IN EGYPTIAN WOMEN OF REPRODUCTIVE AGE GROUP PRESENTING FOR ULTRASOUND EXAMINATION

Hebatallah H.M. Hassan, Alaa Eldin Mohamed Abdel Hamid Mostafa, Mohamed Ali Omar Tamimy

Department of Radiodiagnosis and Intervention, Faculty of Medicine, Alexandria University

Introduction

Uterine and adnexal incidentalomas are frequently encountered on ultrasound (US) examinations performed in women of reproductive age group referred for other indications unrelated to the uterus or adnexae. US is the initial imaging modality of choice for evaluation of uterine and adnexal lesions. It provides the benefits of accessibility, affordability and absence of ionizing radiation. Transabdominal US can accurately diagnose some lesions without further imaging or follow up. Transvaginal US (TVUS) and/or follow up US examination may be needed, in some cases, for better characterization of lesions detected on transabdominal US and monitoring temporal changes in size and morphology. Complex and/or indeterminate adnexal lesions need further evaluation either by Magnetic Resonance Imaging (MRI) and/or surgical resection and histopathology.

Aim of the Work

The aim of the work is to find out the prevalence of uterine and adnexal incidentalomas in Egyptian women of reproductive age presenting for ultrasound examination.

Patients and Methods

This study was conducted on 200 egyptian women of reproductive age group referred for abdominopelvic ultrasound examination for any cause other than gynaecological or obstetric complaint. The study was carried out at the ultrasound unit, department of radiodiagnosis and intervention, Faculty of Medicine, Alexandria Main University Hospital during a period of 6 months interval from April to September 2022. All patients underwent complete history taking and transabdominal (suprapubic) ultrasound. Twenty patients underwent additional Transvaginal ultrasound. Non enhanced Multidetector Computed Tomography (MDCT) was done for one patient as a complementary study. Seven patients from the study group underwent MRI pelvis. Gold standard diagnosis was based upon classical ultrasound findings, follow up clinicoimaging observations, Surgical data or histopathological findings whenever available.

Results

The age of the study group ranged from 14 to 48 years with a mean of 35.03 (standard deviation of 8.25 years) and a median of 37.00 years. Uterine incidentalomas were diagnosed in 36 females (18%) and adnexal incidentalomas were diagnosed in 24 females (12%). Uterine fibroids were the most common uterine incidentalomas detected in 22 females (11%) and Simple ovarian cysts were the most common adnexal incidentalomas detected in 13 females (6.5%).

Table: Frequency of various uterine and adnexal incidentalomas and percentage of each finding over the total cases in the study (n=200)		
Incidentaloma	No.	%
Uterine fibroid	22	11.0
Simple ovarian cyst	13	6.5
Adenomyosis	12	6.0
Haemorrhagic ovarian Cyst	5	2.5
Nabothian cyst	4	2.0
Endometrioma	3	1.5
Ectopic pregnancy	1	0.5
Paraovarian cyst	1	0.5
Uterine duplication anomaly	1	0.5
Mucinous cystadenoma	1	0.5
Serous borderline tumor	1	0.5
Total	64	

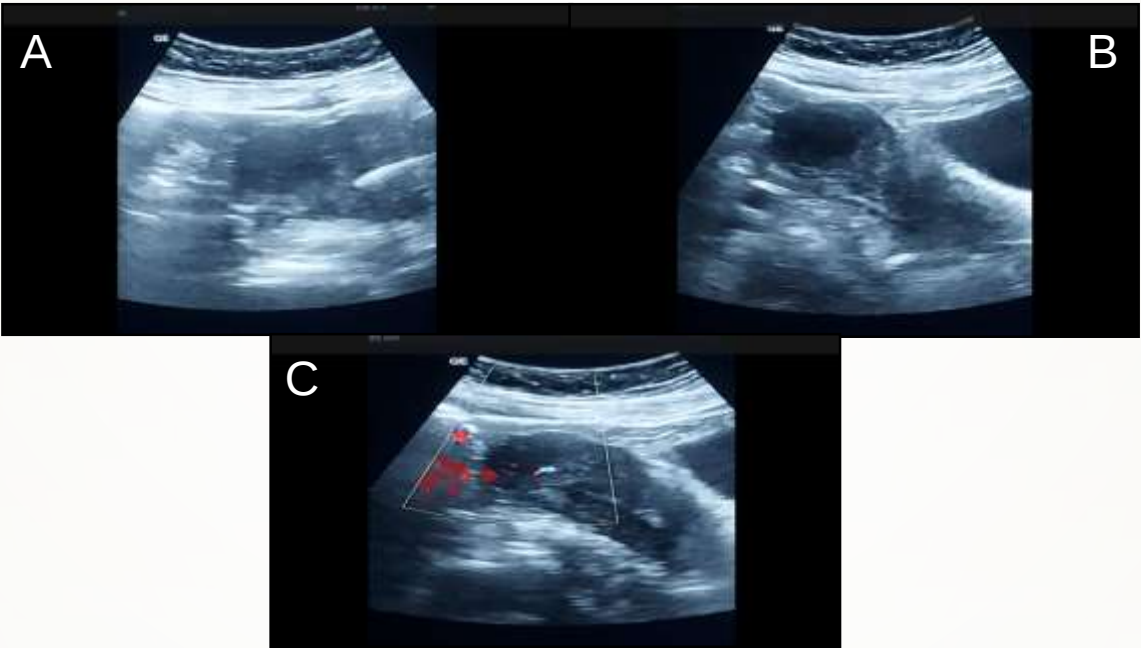


Figure (1) : A 32 year old female patient presenting with history of anaemia with no abnormal vaginal bleeding. A) Transabdominal gray-scale US transverse view shows a well defined hypoechoic subserosal fundal lesion. B) Transabdominal gray-scale US longitudinal view depicts the lesion as a fundal subserosal uterine fibroid which was misinterpreted as a right adnexal mass, however accurate ultrasonographic assessment confirmed being a subserosal fibroid mass which shows positive doppler flow signal in (C).

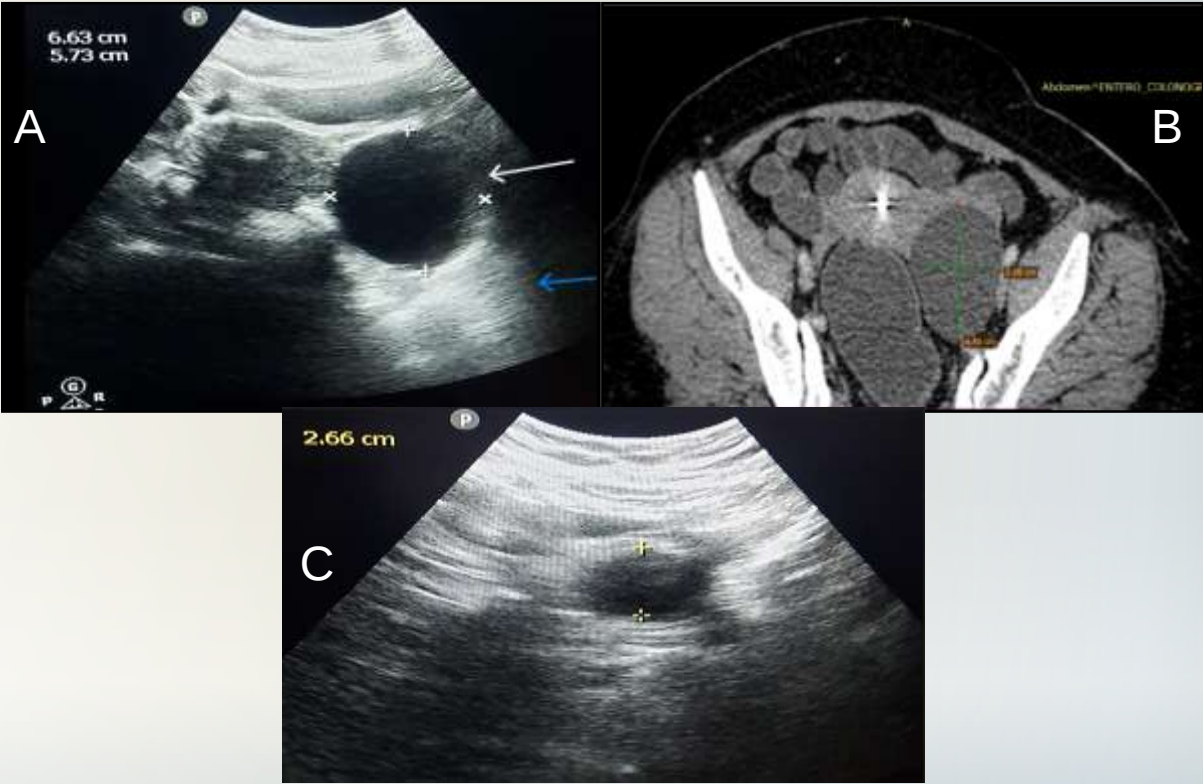


Figure (2): A 47 years old female with history of chronic abdominal pain for 5 years. Referred for US assessment of an incidentally detected left adnexal lesion on CT enterocolonography. A) Transabdominal grayscale US transverse view showing a left simple ovarian cyst measuring 6.63 cm in maximum dimension. B) CT enterocolonography performed 1 day prior showing the same left simple ovarian cyst. The cyst showed complete resolution at three month follow up as shown in (C).

Conclusion

US is the primary imaging modality of choice in the detection and characterization of uterine and adnexal lesions. It helps reach final diagnosis and/or guide management in most cases. Uterine fibroids are the most common uterine incidentalomas and simple ovarian cysts are the most common adnexal incidentalomas detected by transabdominal ultrasound in the reproductive age group. Although much less common, complex and/or indeterminate adnexal lesions can be detected incidentally and need further evaluation either by MRI and/or surgical resection and histopathology.