



# **THE ULTRASOUND JOURNAL of HEALTHCARE**

*Vol. 7, December, 2015*

Chief Editor : Prof. K. C. Bhowmick

**THE ULTRASOUND  
JOURNAL  
OF  
HEALTH CARE**

*Volume 7  
December, 2015*

**HEALTH CARE**  
33/1, NORTHERN AVENUE  
KOLKATA-700 030

EDITORIAL BOARD

**Prof. K. C. Bhowmick**

**Dr. A. K. Roy**

**Dr. S. Mitra**

**Dr. Sitani**

A C

## **CONTENTS**

### **Editorial-I**

Dr. A. K. Roy

### **Editorial-II**

Dr. U. Sitani

### **A Case Report on USG / 9**

Dr. Benjamin Lalramchuana



### **Gnancy with Twisted Ovarian Cyst**

#### **A Case Report / 14**

Dr. Dilip kumar Pal

Dr. Ranu Ghosh



### **Polycystic Ovary Syndrome :**

#### **A Case Report / 17**

Dr. Ranu Ghosh

Dr. Dilip kumar Pal



### **Serous Cystadenoma of Ovary in a Young Girl : A Case Report**

Dr. Murari Mohan Das / 25



### **A Case Report of Post Hysterectomy Large Endometrioma of Right Ovary / 28**

Dr. Palas Halder, MBBS



**A Case of Bilateral Dermoid Ovarian  
Cyst-Ultrasonographic Findings / 33**

Dr. Anupama Mahli



**Gestastional Trophoblastic Disease-Diagnostic  
Dilemma : A Case Report / 39**

Dr. Hoorbano Khan



**Case Series of Mullerian Anomalies-Ultrasonography as a  
Diagnostic Tool / 44**

Dr. Anupama Mahli



**Case on Complex Adnexal Mass / 58**

Dr. U. Sitani



**Complete Placenta praevia with placenta accreta-managed by  
step wise approach : A case report**

Dr. Arijit Debnath / 67



**Renal Cell Carcinoma in Pregnancy-Dilemma in  
Diagnosis and Management / 71**

Dr. Sashi Kant Tewary



**Case Report :  
Rare case of Acardiac Acephalic Twin / 77**

Dr. Anita Kumari

Act

A cute p  
depar  
threatening  
imaging is

A patie  
from uppe  
and from r  
Now the c  
patients- u

In this c  
regarding  
for everyo  
way behin  
lectures to  
united.

Ultras  
receiving  
the abdom  
pathologi  
particular  
upper as  
in all age  
large vess  
are requir  
surveillan

It is in  
women a  
It require  
US that b  
and by u  
or hyper

## **EDITORIAL - I**

### **Acute pain abdomen- ultrasonography or CT scan**

**A**cute pain abdomen is a very common presentation in any outpatient department and can represent in conditions ranging from benign to life-threatening. If there is any doubt of underlying causes of that pain a diagnostic imaging is looked for help.

A patient may present with pain abdomen of various aetiologies starting from upper abdomen consisting of liver, GB, spleen or pancreatic pathology and from mid- lower abdomen of kidney, both quadrant or pelvic pathologies. Now the query arises what should be the ideal diagnostic technique in these patients- ultrasonography or CT scan, apart from other modalities.

In this context doctors in the world are to some extent divided in their views regarding ideal choice of imaging techniques. One group go behind ultrasound for everyone for initial diagnostic imaging when another group like to go straight way behind CT scan. Many valuable hours are spent behind organising seminars, lectures to come to a conclusion but till date two thoughts could not be made united.

Ultrasonography uses high velocity sound waves for transmission and receiving the reflections of those waves to visualise internal organs through the abdominal wall. Except for some cases of pancreatic and gastrointestinal pathologies US is very sensitive for detecting abnormalities in abdominal organs particularly liver, GB diseases, renal like calculi and hydronephrotic changes, upper as well as lower parts of ureters, bladder including other pelvic organs in all age groups including pregnant women. US is especially important for large vessel aneurysms and inflammatory bowel diseases where multiple scans are required for screening, diagnosis, treatment and frequent monitoring and surveillance purposes.

It is inexpensive, easily available, portable, safe even to child and pregnant women and above all carries no risk of having exposure to harmful radiation. It requires little or no special preparation for imaging. Another advantage of US that by using real time mode movements of internal organs can be visualised and by using Doppler effect any blockage or narrowing, aneurysmal dilation or hyper and hypo circulation of a tissue can be ascertained. It can also be used

for guidance of taking biopsies from different tissues or paracentesis by expert hands.

US waves are dispersed by air or gas, so not an ideal imaging technique for air filled bowel or organ obscured by bowel, like middle part of ureters. Very obese patients are also examined with many difficulties for attenuation of sound waves. Accuracy of diagnosis is also very much dependent on experience and expert hands of sonologists.

On the other hand CT scan is a specialised X-ray showing cross sectional images of different organs of abdomen. It is highly sensitive and specific for accuracy of diagnosis and less operator dependent.

CT scan is expensive, requires specific establishments, not available everywhere. CT scan often requires contrast agent, either orally or intravenous, for better viewing of organs. Abnormal renal parameters or a known allergy are contraindicated for applying contrast agents. CT scan emits radiation for which pregnancy is another contraindication. So a H/O pregnancy is a must for doing CT scan of women of reproductive age group. Abdominal CT exposes an effective radiation dose of 10 mSv as compared to annual background radiation dose of only 3 mSv. So repeated exposures of radiations also increases the risks of cancers.

American College of Radiologists (ACR) has developed clinical guide lines in this regard called 'ACR Appropriateness criteria' based on location of abdominal pain to help physician to take help of most appropriate imaging techniques. ACR recommends US for upper abdominal pain as initial imaging modality when CT is for lower abdominal quadrant pains.

For acute sigmoid diverticulitis, MC cause of left lower quadrant pain in an adult, and acute appendicitis, MC right lower quadrant pain, and diffuse abdominal pain CT is recommended though US is also give good yield by experienced sonologists.

For upper abdominal like liver, GB, pancreas, spleen, kidney etc and also for women with gynecology and obstetrics cases of acute pain abdomen like ovarian cyst torsion, ectopic pregnancy, PID either TAS or TVS are recommended for initial imaging modality.

We are looking for in future how long this competition will go on.

**Dr. A. K. Roy**

## **EDITORIAL-II**

**H**ematometra or hemometra is a condition involving collection or retention of blood in the uterus. It is most commonly caused by an imperforate hymen or a transverse vaginal septum. Typically presents as cyclic, cramping pain in the midline of the pelvis or lower abdomen. Patients may also report increased urinary frequency and urinary retention. When palpated, the uterus will typically feel firm and enlarged. Hematometra develops when the uterus becomes distended with blood secondary to obstruction or atresia of the lower reproductive tract-the uterus, cervix or vagina-which would otherwise provide an outflow for menstrual blood. It is most commonly caused by congenital abnormalities, including imperforate hymen, transverse vaginal septum or vaginal hyperplasia. Other causes are acquired, such as cervical stenosis, intrauterine adhesions, endometrial cancer, and cervical cancer. Additionally, it may develop as a complication of uterine or cervical surgery such as endometrial ablation, after abortion, as well as after childbirth. The diagnosis can be confirmed by ultrasound, which will show blood pooled in the uterus as an hypoechoic or sonolucent ovoid mass and an enlarged uterine cavity. Differential diagnosis includes pyometra and hydrometra. Although history and palpation of the abdomen indicate the existence of hematometra, ultrasound is done to confirm the condition.

**Dr. Urvashi Sitani**