

Critical Ultrasonography Clinic

Dr. Manoj
Chinchwadkar
MMC Regd. 65306
MBBS DMRD

PC-PNDT Regd. 40/2002
Weekdays: 9.00 a.m. To 6.00 p.m. Saturday: 9.00 a.m. To 1.00 p.m.
1731, Sadashiv Peth, Near Swami Math, Off Tilak Road, Pune 411030. INDIA

①: 91-20-2448 1356
②: 9823077656

Patient:	Date:	Region:	Tech.:
Mrs. Priyanka Patil ID: 219401-133548-2	18 December 2023	Obstetric	2D, Doppler, 3D, Anomaly scan
Ref.: Dr Priyanka Suryawanshi			
Clinical Background:			
<ul style="list-style-type: none">She has 18 weeks 5 days amenorrhoea by LMP date on 09-08-23.Gestational age is expected to be 18 weeks 5 days. Gestational age is based on LMP date. GA by LMP and Biometry at 11 weeks 6 days are similar.Expected Due Date is Wednesday 15-05-2024.She is known to have twin gestation. It was thought to be a dichorionic twin gestation on previous USG.			

Obstetric ultrasound examination Report

- 18 weeks 5 days maturity live twin fetuses are seen. Twinning is monochorionic diamniotic rather than dichorionic diamniotic.
- Visualised appearances are normal in both the fetuses at this stage.
- Both the fetuses show concordant growth.
- Both fetuses have adequate liquor.
- Endocervical length measures 42.2 mm.
- Uterine artery Doppler indices are normal.
- A follow-up examination after 4 weeks will be useful.

Please find detailed description of findings on following pages ...

I, Dr. Manoj Chinchwadkar, declare that while conducting ultrasonography on Mrs. Priyanka Patil, I have neither detected nor disclosed the sex of the fetus to any body in any manner.


Dr. Manoj Chinchwadkar,
MBBS, DMRD,
MMC Regd. No. 65306

DR. MANOJ CHINCHWADKAR
M.B.B.S., D.M.R.D.
Regd. No. 65306
1731, Sadashiv Peth, Pune - 30

Description of Ultrasound findings

Twinning

- | Twinning is monochorionic diamniotic.
Thin septum runs between the two.
- | Both the fetuses show normal cardiac activity and movements.
- | Heart rate measures 152 beats/min in the first fetus.
- | Heart rate measures 150 beats/min in the second fetus.
- | They lie one below the other.
- | Right sided fetus is the first fetus. Second lies to maternal left and cranial to first fetus.



Fetal growth

- | First fetus has size corresponding to the size of fetus at 17 weeks 6 days. It shows adequate growth.
- | Second fetus has size corresponding to the size of fetus at 18 weeks 0 days. It shows adequate growth.
- | Estimated weight measures $197 \text{ gm} \pm 30 \text{ gm}$ in first fetus and $217 \text{ gm} \pm 33 \text{ gm}$ in the second fetus.
- | Discrepancy in estimated weights of the two fetuses is 9.2% (should be less than 20%).

Liquor

- | Amniotic fluid is adequate in amount in sac of the first fetus. It is adequate in sac of the second too.
- | Two quadrant AFI measures 6.37 and 6.84 in sacs of first and second fetus respectively.
- | Maximum pocket depth (MPD) measures 3.24 cm and 3.87 cm in sacs of first and second fetus respectively.
- | No evidence of oligohydramnios-polyhydramnios sequence is seen.

Placenta

- | Single placenta lies on the anterior, left lateral, posterior walls.
- | Lower border of the placenta is 30 mm from internal os today. It is not low placed.
- | No evidence of velamentous insertion of cord is seen in either of the fetuses.
- | No evidence of unequal sharing of placenta is seen.

Continued:

Cervix

- | Endocervical length measures 42.2 mm.
- | Internal os is closed and does not show funneling.

Doppler - Uterine arteries

- | On Doppler interrogation, right uterine artery shows pulsatility index of 1.
- | On Doppler interrogation, left uterine artery shows pulsatility index of 0.9.
- | Average pulsatility index is 0.95, which is below the 95th centile values.

Doppler - Umbilical artery

- | Umbilical artery for the first fetus shows pulsatility index of 1.43 which is below the 95th centiles values. Diastolic component in the umbilical artery flow is not absent.
- | Umbilical artery for the second fetus shows pulsatility index of 1.3 which is below the 95th centiles values. Diastolic component in the umbilical artery flow is not absent.

Doppler - Middle cerebral artery

- | Middle cerebral artery for the first fetus shows peak systolic velocity of 26.67 cm/s (1.09 MoM as expected median velocity is 24.3 cm/s).
- | Middle cerebral artery for the second fetus shows peak systolic velocity of 26.33 cm/s (1.08 MoM as expected median velocity is 24.3 cm/s).

Fetal appearances

- | No evidence of cardiomegaly or hydrops is seen in either of the fetuses.
- | Visualised structures show normal appearances in both the fetuses.
- | Anomaly detection is dependent on many factors such as gestational age at scanning, fetal orientation, amount of surrounding fluid, maternal obesity, subtlety of the abnormality, etc.

Region	Findings	Remarks
Craniospinal structures	Normal in both	No evidence of hydrocephalus is seen. Cavum septum pellucidum is seen. Posterior fossa structures show normal appearances. No evidence of mega cisterna magna is seen. No evidence of large defect is seen in visualised parts of the spine. Small spinal defects can get undetected on ultrasound.
Thoracic structures	Normal in both	Both the lungs show normal echogenicity. No evidence of mediastinal shift is seen.

Region	Findings	Remarks
Cardiac structures	Normal in both	Normal situs is seen. Cardiac chamber sizes are normal. No evidence of large VSD is seen, though some VSD will not get detected on ultrasound. Atrioventricular and ventriculoarterial connections are normal.
Abdominal structures	Normal in both	Stomach is seen (some types of oesophageal atresia, tracheo-oesophageal fistula can still get undetected on ultrasound). No evidence of duodenal or bowel dilatation is seen today. No evidence of diaphragmatic hernia is seen. No evidence of omphalocoele is seen.
KUB	Normal in both	No significant pyelectasis or hydronephrosis is seen on either sides. Both the kidneys normal appearances. Urinary bladder is seen.
Limbs	Normal in both	Visualised parts of the limbs show normal appearances. No evidence of overlapping fingers are seen. No evidence of club foot is seen.
Miscellaneous structures	Normal in both	Nuchal pad is not thickened. Nasal bone has formed. No evidence of cleft lip is seen (An isolated cleft palate deformity can get undetected on ultrasound). Three vessel cord is seen.

Gestational age	As on Date 18-Dec-23
Amenorrhoea By LMP date 09-Aug-23 By Biometry at 11 weeks 6 days	18 weeks 5 days 18 weeks 3 days ± 7 days
Best estimate of gestational age (GA) Best estimate of Expected Due Date (EDD)	18 weeks 5 days Wednesday 15-May-2024
<p>Gestational age is based on LMP date. GA by LMP and Biometry at 11 weeks 6 days are similar.</p>	

CRITICAL ULTRASONOGRAPHY

Date of Exam: 18.12.2023 Page 1/13
Exam Type:

Name: Patil, Priyanka	DOB:	Sex: Female
Pat. ID: E81659-23-12-18-3	Perf. Phys.:	
Indication:	Ref. Phys.:	
	Sonogr.:	

Fetus: A/2

LMP: 09.08.2023	GA(LMP): 18w5d	EDD(LMP): 15.05.2024	G: <input type="checkbox"/>	Ab: <input type="checkbox"/>
DOC: GA(AUA)	17w6d	EDD(AUA): 21.05.2024	P: <input type="checkbox"/>	Ec: <input type="checkbox"/>
EFW (Hadlock):	Value: 197g	Range: ± 29g	Age: 17w3d	GP: Hadlock
AC/BPD/FL/HC				3.5%

2D Measurements AUA	Value	m1	m2	m3	Meth.	GP	Age
BPD (Hadlock): <input checked="" type="checkbox"/>	4.11 cm	4.11			avg.	39.1%	18w3d
OFD (HC):	5.05 cm	5.05			avg.	5.1%	17w4d
HC (Hadlock): <input checked="" type="checkbox"/>	14.41 cm	14.41			avg.	5.3%	17w5d
HC* (Hadlock): <input checked="" type="checkbox"/>	14.43 cm	14.43			avg.	8.7%	17w2d
AC (Hadlock): <input checked="" type="checkbox"/>	11.51 cm	11.51			avg.	10.9%	17w4d
FL (Hadlock): <input checked="" type="checkbox"/>	2.52 cm	2.52			avg.	31.9%	18w1d
HL (Jeanty): <input checked="" type="checkbox"/>	2.60 cm	2.60			avg.		

2D Measurements	Value	m1	m2	m3	m4	m5	m6	Meth.
Uterus								
Cervix Length	4.22 cm	4.22						avg.

CRITICAL ULTRASONOGRAPHY

Date of Exam: 18.12.2023 Page 1/13
Exam Type:

Name: Patil, Priyanka	DOB:	Sex: Female
Pat. ID: E81659-23-12-18-3	Perf. Phys.:	
Indication:	Ref. Phys.:	
	Sonogr.:	

Fetus: B/2

LMP: 09.08.2023	GA(LMP): 18w5d	EDD(LMP): 15.05.2024	G: <input type="checkbox"/>	Ab: <input type="checkbox"/>
DOC: GA(AUA)	18w0d	EDD(AUA): 20.05.2024	P: <input type="checkbox"/>	Ec: <input type="checkbox"/>
EFW (Hadlock):	Value: 217g	Range: ± 32g	Age: 17w6d	GP: Hadlock
AC/BPD/FL/HC				11.1%

2D Measurements AUA	Value	m1	m2	m3	Meth.	GP	Age
BPD (Hadlock): <input checked="" type="checkbox"/>	4.14 cm	4.14			avg.	43.0%	18w4d
OFD (HC):	5.36 cm	5.36			avg.		
HC (Hadlock): <input checked="" type="checkbox"/>	15.09 cm	15.09			avg.	17.0%	18w1d
HC* (Hadlock): <input checked="" type="checkbox"/>	14.98 cm	14.98			avg.	14.4%	18w0d
AC (Hadlock): <input checked="" type="checkbox"/>	12.12 cm	12.12			avg.	18.2%	17w6d
FL (Hadlock): <input checked="" type="checkbox"/>	2.64 cm	2.64			avg.	20.2%	18w0d
HL (Jeanty): <input checked="" type="checkbox"/>	2.43 cm	2.43			avg.	12.1%	17w4d

2D Measurements	Value	m1	m2	m3	m4	m5	m6	Meth.
Uterus								
Cervix Length	4.22 cm	4.22						avg.