

FETAL BIOMETRY - 5 POINTS

CRL
BPD
HC
AC
FL

SOFT MARKER EVALUATION - 5 POINTS

Nuchal Translucency
NB
DV
FMF angle
TR

EARLY FETAL ANOMALY SCANNING (FTS)

FETAL HEAD

Brain - 2 Planes

☐ Trans Ventricular Plane - Butterfly sign

☐ Mid brain - Aqueduct Plane

Face - 2 Planes

☐ Profile - Mid Sagittal View

☐ PMT

☐ 2 orbits, 2 Lips, 2 Bony structures
(Palate and Mandible)

FETAL TRORAX

☐ 2 Organs - Heart & Lungs

☐ 2 planes - 4 CH and 3VTV

FETAL SPINE

2 planes

☐ Transverse & Sagittal

FETAL ABDOMEN

2 Transverse planes

☐ AC and Cord insertion at Umbilicus

☐ 2 Umbilical arteries at Side of bladder & cord insertion

☐ 2 Kidneys

☐ 2 Sagittal plane - Mid sagittal for cord insertion and Left para sagittal plane for Lexus sign

FETAL LIMB

☐ 2 Upper limbs, with 2 segments with

2 sets of bones

☐ 2 Lower limbs, with 2 segments with

2 sets of bones

☐ 2 Open hands with fingers

☐ 2 Feet with fingers and CTEV

FETAL GESTATION AGE

☐ 2 Methods - LMP and CRL

DOPPLER EXAMINATION

☐ DV

☐ 2 Uterine Artery

FETAL ENVIRONMENT

☐ Cervical length

☐ Placenta

RISK ASSESSMENT

☐ Aneuploidy Risk : Risk a priori and

Adjusted Final Risk

☐ Preterm birth risk prediction

☐ FGR and Pre-eclampsia risk prediction

VOLUME IMAGING (OPTIONAL)

☐ Fetal Braing

☐ Fetal Heart

☐ Whole Body for limbs

ANEUPLOIDY MARKERS (OPTIONAL)

☐ NIPT

☐ Dual Markers

☐ AFP, PLGF

Seen by : _____

Approved by : Dr. Prashant Acharya

ANOMALY SCREENING

A. Fetal Biometry B. Targeted Fetal anomaly scan

FETAL BIOMETRY

- Head** BPD
HC/OFD to Calculate HC
- Long Bones** Femur Length
Humerus Length
- Abdomen** APTD
TTD/AC to calculate AC (Ellipse)

ANEUPLOIDY SCREENING

SOFT MARKERS

- Head** Nuchal Fold
Lateral Ventricle
- Bones** Femur
Nasal Bone
- Abdomen** Echogenic Bowel
Pyllectasis
- CVS** Echogenic Intracardiac Focus
Aberrant Right Subclavian Artery

RISK FIGURES

Risk at Prior & Corrected Final Risk for Trisomy 21

TARGETED FETAL ANOMALY SCANNING

FETAL HEAD

- Brain :**
- Trans Ventricular Plain
- 2 Landmarks : CSP, Midline Falx
 - 2 meas. for biometry : BPD, OFD
 - 2 meas. for brain : lateral ventricle-ant, post horn
- Trans Cerebellar Plain
- 2 landmarks : CSP, Midline Falx
 - 2 measurements : TCD, CM
- Face :**
- 2 Plains - Profile and PMT
 - 2 Orbits, 2 Lips, 2 bony structure - palate & mandible

FETAL THORAX

- 2 Organs : Lungs & Heart
- 2 Views : Transverse & sagittal
- 2 Transverse view : 4ch & 3vv

FETAL SPINE

- 2 Plains : Transverse & Sagittal / Coronal

FETAL LIMBS

- 2 Upper limbs with 2 segments of upp. limb with 2 sets of bones
- 2 Lower limbs with 2 segments of lower limb with 2 sets of bones
- 2 Open hands with fingers
- 2 Feet for CTEV

FETAL ABDOMEN

- 2 Tr. Plains at AC & level of umbilicus
- 2 Landmarks of AC : middle 1/3 of port. vein & stomach
- 2 Umbilical artery : Tr. section of cord & side of bladder
- 2 Kidneys for GUT evaluation Tr. section of kidneys and full bladder

FETAL HEART

- 2 methods for situs : clockwise/anticlockwise & Draw a Doll on Hand
- 2 Sections for situs & axis confirmation : AC & 4CH view
- 2 Tr. Sections for cardiac evaluation 4CH & 3VVT view
- 2 Outflow Tract : LVOT & RVOT
- 2 Arches : Aortic Arch & Ductal Arch
- 2 Venous Channels : RA Hammock view & LA for 2 Pul veins
- 2 New modalities in fetal echo : STC & Silhouette

FETAL GROWTH ASSESSMENT

- 2 Landmarks
- AC EFW
- 2 Vessel Doppler for Basic Evaluation in FGR
- Umbilical Artery MCA
- 2 Vessel Doppler for "Decision Making" in FGR
- Aortic Isthmus Doppler
 - Ductus Venosus
- 2 Uterine Artery Doppler for prediction
- FGR PIH
- Timing of Delivery
- Grade FGR
 - Can wait till grade 2 only

FETAL ENVIRONMENT

- Placenta :**
- Location Thickness
- Liquor Assessment :**
- Qualitative Quantitative
 - Eyeballing AFI
 - Single Largest Pocket MVP
- CERVIX : 2 Points**
- Length Int. os width

VOLUME IMAGING (OPTIONAL)

- Fetal Brain Fetal Heart
- ANEUPLOIDY MARKERS (OPTIONAL)**
- NIPT Quadraple Markers

2min Fetal Echo: 12 Sections

- AC
- 4CH view
- Crossing PA & Ao
- 3VV
- 3VVT
- Highest ARCH with Lt BC vein
- For ARSA
- RVOT
- LVOT
- Aortic Arch
- Pulmonary Arch
- Az. Arch

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FETAL BIOMETRY

Head	BPD HC/OFD to Calculate HC
Long Bones	Femur Length Humerus Length
Abdomen	APTD TTD/AC to calculate AC (Ellipse)

Fetal Growth & Doppler
Late Developing Anomalies
Echo & Cardiac Function

TARGETED FETAL ANOMALY SCANNING

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- Ductus Venosus

2 Uterine Artery Doppler for Placental Function

- FGR
- PIH

Timing of Delivery

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FETAL ENVIRONMENT

Placenta :

- Location
- Adherent

Liquor Assessment :

- Qualitative
- Quantitative
- Eyeballing
- AFI
- Single Largest Pocket
- MVP

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