

Baby Face

2D Acquisition: the image must include the baby's face profile "looking to the probe". Before the 3D acquisition, except when the XLIGHT is used, increase a little bit the B-Mode gain and the image's contrast in order to better differentiate the amniotic fluid and the profile.

B-Mode density: 2

Quality: MEDIUM or 3

SA and SZ: $50^\circ < SA < 60^\circ$, $50^\circ < SZ < 70^\circ$

ROI's dimension: It must contain the baby profile with the cutting line aligned with the face

Volume Acquisition Modality: 4D

Volume Reconstruction Modality: AUTO

Volume Environment: TPI, 2x1

Notes: XLIGHT or SEMITR + Depth Palette are useful to maximize the 3D rendering quality.



CNS

2D Acquisition: section perpendicular to pellucidus septum

B-Mode density: 2

Quality: MEDIUM or HIGH

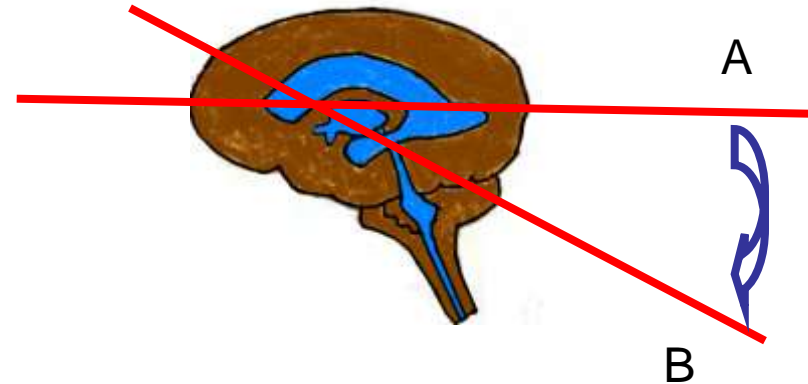
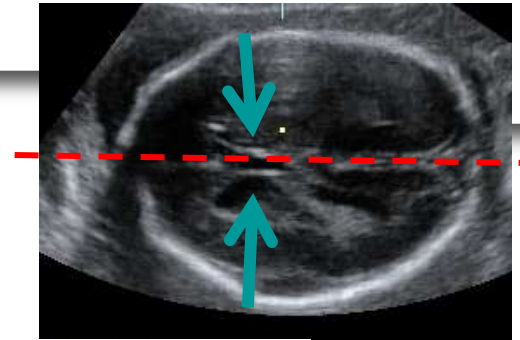
SA and SZ: SA = 45° (2nd tr) / 60° (3rd tr) , SZ = 70°

ROI's dimension: ROI OFF

Volume Acquisition Modality: 3D

Volume Reconstruction Modality: FRONT - BACK

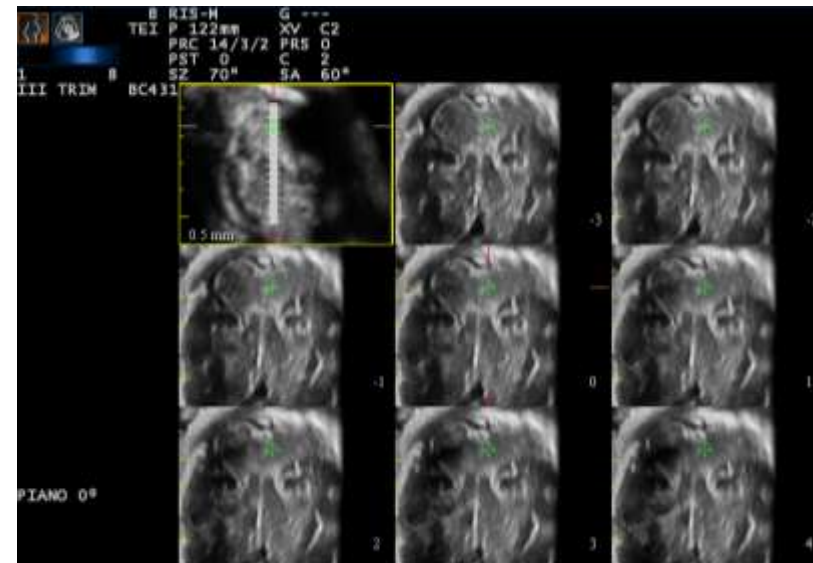
Volume Environment: TMI (9 lines)



Cerebellum:

After acquire the volume from the A-plane, rotate it up to reach the B-plane.

On the B-plane the TMI modality must be applied to completely evaluate the cerebellum.



Corpus callosum

2D Acquisition: section perpendicular to pellucidus septum

B-Mode density: 2

Quality: MEDIUM or HIGH

SA and SZ: SA = 45° (2nd tr) / 60° (3rd tr) , SZ = 70°

ROI's dimension: ROI OFF

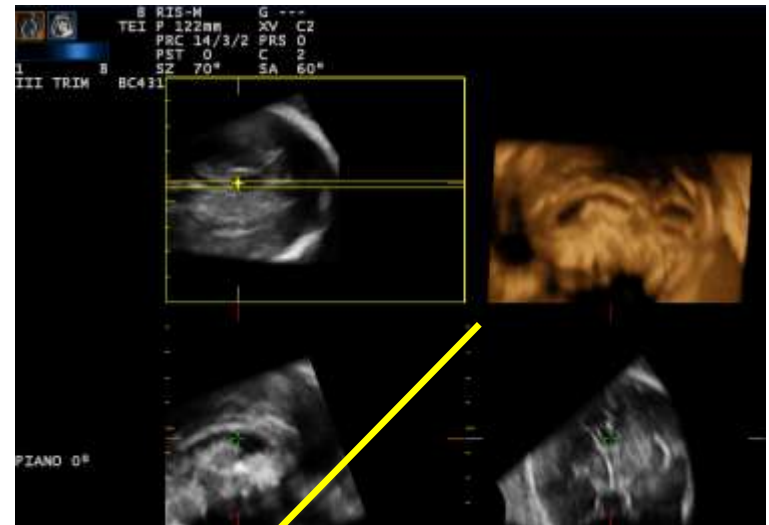
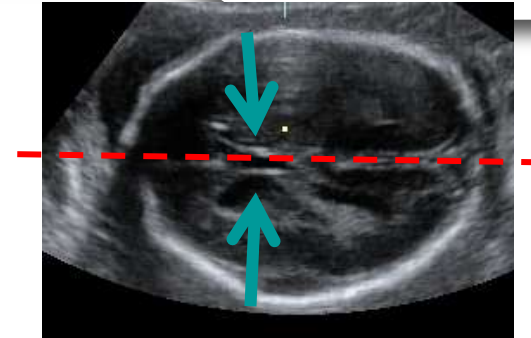
Volume Acquisition Modality: 3D

Volume Reconstruction Modality: FRONT - BACK

Volume Environment: TSI

Corpus Callosum:

After acquire the volume, use the TSI environment placing the two border planes of the slice surrounding the pellucidus septum



Palate

2D Acquisition: Transversal scan of the head at level of the ears/nose

B-Mode density: 2

Quality: HIGH

SA and SZ: SA = 50° , SZ = 50°

ROI's dimension: ear to ear, nose to neck

Volume Acquisition Modality: 3D

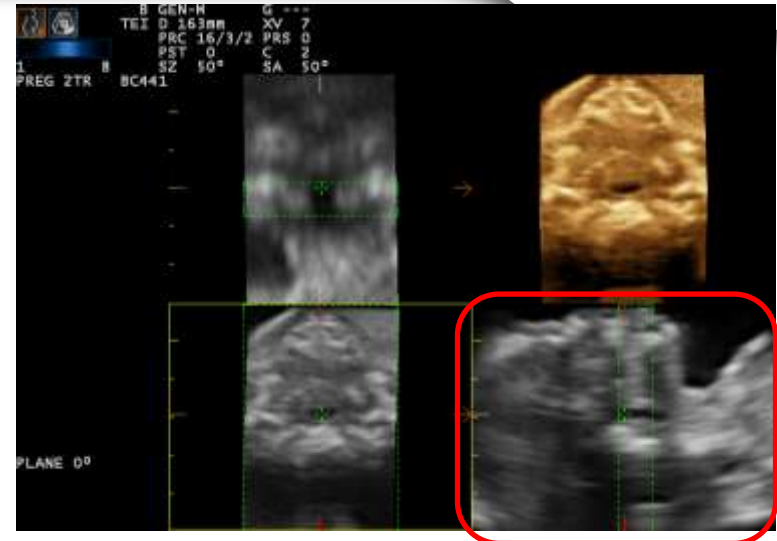
Volume Reconstruction Modality: FRONT - BACK

Volume Environment: TSI or TMI

Notes:

TSI: the two planes must be taken in the longitudinal scan of the head and at the level of the mouth.

TMI: put the cutting planes perpendicular to the longitudinal projection of the head in order to have the planes showing the mandible, lips, nose, cerebellum, jaw, orbits



Baby's Spine

2D Acquisition: Let the image a little bit more contrasted, take a longitudinal scanning of the column and align the cutting line with the spine profile

B-Mode density: 2

Quality: High or 4

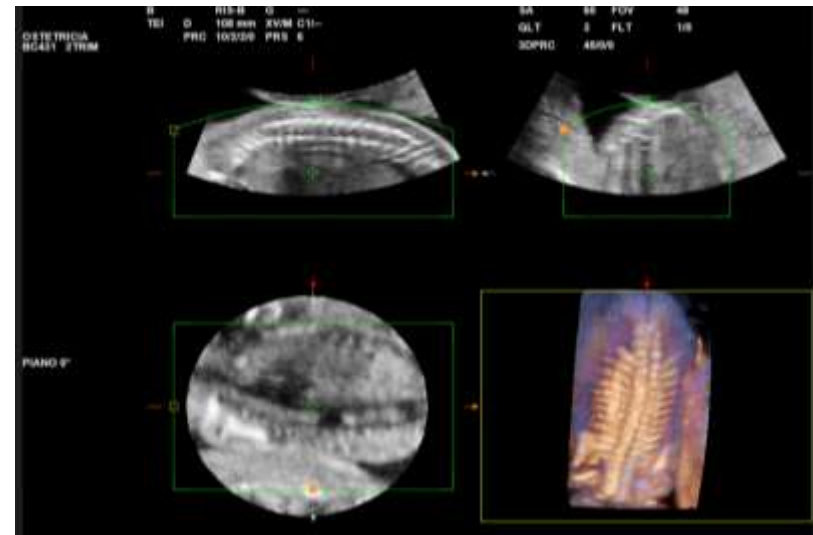
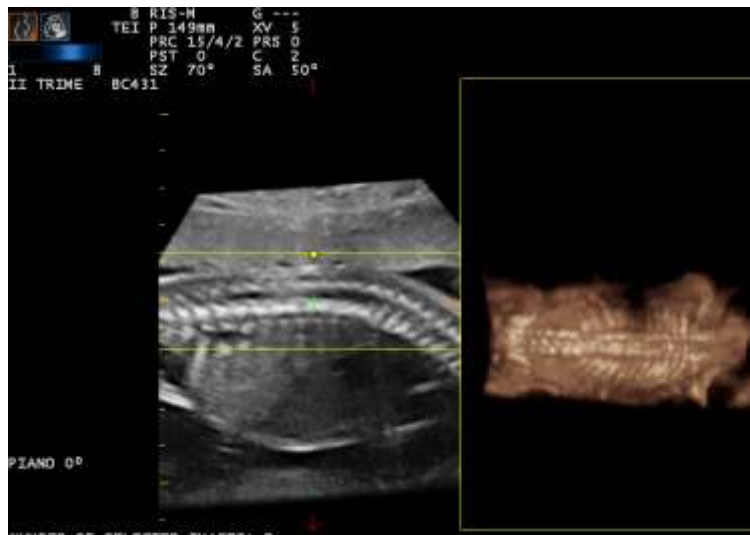
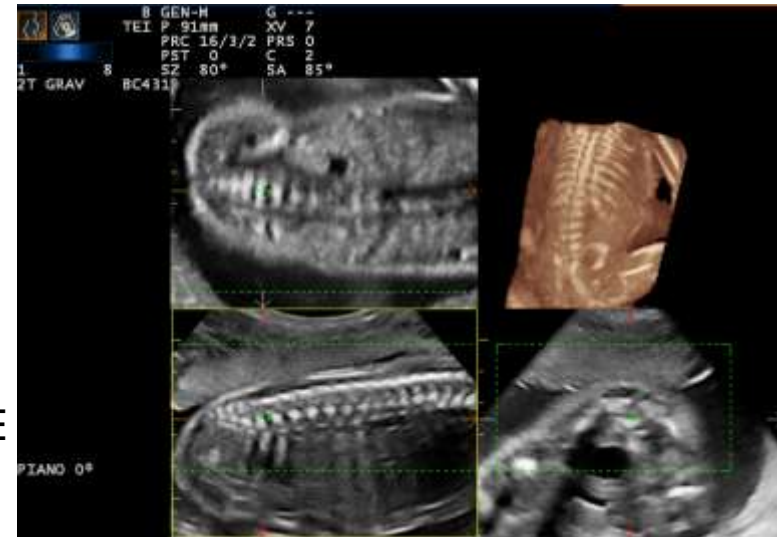
SA and SZ: $60^\circ < SA < 80^\circ$, $SZ > 65^\circ$

ROI's dimension: as large as the columns

Volume Acquisition Modality: 3D

Volume Reconstruction Modality: VIEW PLANES/LINE

Volume Environment: TSI or TPI



XSTIC

2D Acquisition: B-Mode or B+CFM, setting of echocardiography, depth 120mm, tailored to speed up FR up to 70 Hz. Start acquisition from 4-Chambers view

B-Mode density: 1

CFM density: 1

PRF: 5.0 KHz

Quality: Medium (12sec = 24 - 30 cycles)

SA and SZ: SA = 20°/25° (2nd tr) - 35°/40° (3rd tr),
SZ = 30°/35°

ROI's dimension: twice/three times heart dimension

Volume Acquisition Modality: STIC

Volume Reconstruction Modality:

Volume Environment: TPI or TMI

Notes:

Lateral 4-Chamber (septum) -> Max rendering for B-Mode

Apical 4-Chambers -> Max rendering for CFM

Lateral 4-Chamber



Apical 4-Chamber



Endometrium

2D Acquisition:

longitudinal uterus scanning with the endometrium in the center of the image, fundamental frequencies to have more signal in depth, a little more of B-Mode gain.

B-Mode density: 2 or 3

Quality: HIGH

SA and SZ: $70^\circ < SA < 90^\circ$, SZ must contain the uterus' body

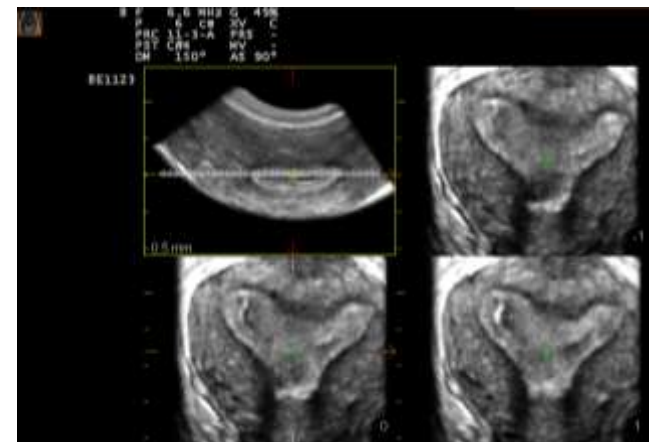
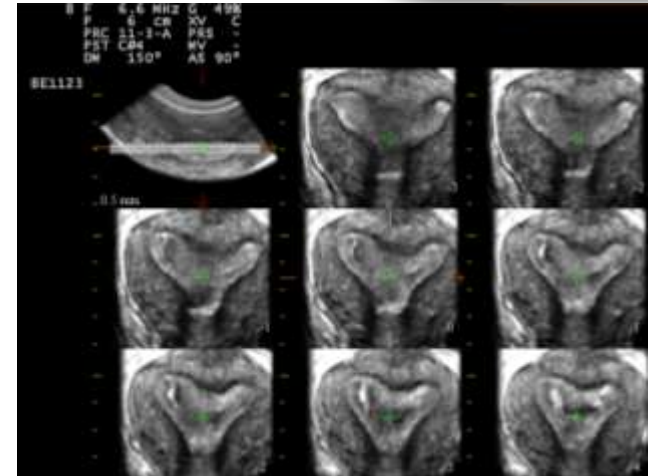
ROI's dimension: OFF

Volume Acquisition Modality: 3D

Volume Reconstruction Modality: TOP - BOTTOM

Volume Environment: TMI or TSI (the two cutting lines close to endometrium borders)

Note: Unzoom the volume to rotate it faster in the 3D reconstruction



Follicles Counting

B-Mode density: 2 or 3

Quality: HIGH

SA and SZ: SA = 90° , SZ = 150°

ROI's dimension: Surrounding the ovary

Volume Acquisition Modality: 3D

Volume Reconstruction Modality: FRONT - BACK

Volume Environment: VRA, counting

Schematic diagram of a human ovary showing various stages of egg development.

