

The Mysterious World of OB Ultrasound Coding



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Presented by:
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Lori-Lynne's Bio:

She is a Specialty based E&M, and Procedure Coding, Compliance, Data Charge entry analyst and HIPAA Privacy specialist. Over the last 20 years she has successfully conducted pre-payment, post-payment and audit charge services for medical providers and insurance payers. She has worked closely with contracted 3rd party insurance payers for successful reimbursement outcomes. She has experience with both inpatient and outpatient coding for physician based, and hospital based providers and facilities, in addition to supervising coding and clinical staff.

Ms. Webb contributes educationally based coding articles and educational updates for national coding publications. She has her own 'Lori-Lynne's coding coach blog' and is the coding resource for obgynhospitalist.com . She has presented at the National AHIMA and AAPC conferences, IdHIMA (State of Idaho) conferences, and local AAPC chapters. She is an AHIMA ACE mentor; teaches CPT®, ICD-9 & 10, HCPCS; and is an AHIMA accredited ICD-10 Certified Trainer. Her major specialty is Women's Services. This includes Maternal Fetal Medicine, OB/GYN office and facility, OB/GYN Hospitalist Labor/Trauma Services, OB/GYN Oncology, Urology, and General surgical coding.

Learning Objectives:

1. What is involved and visualized in an OB Ultrasound
2. Understand and use the approved abbreviations pertinent to OB Ultrasound and Maternal Fetal Medicine
3. Understand the documentation criteria needed to code and bill CPT® and diagnosis codes for OB Ultrasound and Maternal Fetal Medicine
4. Understand the differences in clinical application of how and why a Trans-Vaginal and Trans Abdominal ultrasound is performed and the clinical utilization of these scans

Let's start at the beginning...

What is an Ultrasound?

Ultrasonic sound (Ultrasound) is:

- The use of ultrasonic (sound) waves for diagnostic or therapeutic purposes
- to image an internal body structure
- monitor a developing fetus
- generate localized deep heat to the tissues.

Ultrasound Safety/Risks

- Ultrasound is considered a very safe procedure for both the mother and the fetus.
- Ultrasound does not produce ionizing radiation or pose radiation risk to mother or fetus.

What is an Ultrasound?

- The currently used equipment for such a scan are called real-time scanners with the ability to provide a continuous picture of a moving fetus on a monitor screen.
- Very high frequency sound waves of between 3.5 to 7.0 megahertz are generally used for this purpose.

What is an Ultrasound?

- These waves are emitted from a transducer, which is placed in contact with the maternal abdomen and is moved to the particular part of the uterus.
- These frequencies when reflected back from the fetal surface produce a typical sonographic image, which can be read and categorized with various computer software.

The Ultrasound Machine

A basic ultrasound machine has the following parts:

- **Transducer probe**
 - probe that sends and receives the sound waves
- **Central processing unit (CPU)**
 - computer that does all of the calculations and contains the electrical power supplies for itself and the transducer probe
- **Transducer pulse controls**
 - changes the amplitude, frequency and duration of the pulses emitted from the transducer probe
- **Display**
 - displays the image from the ultrasound data processed by the CPU
- **Keyboard/cursor**
 - inputs data and takes measurements from the display
- **Disk storage device** (CD/DVD Hard Drive)
 - stores the acquired images
- **Printer**
 - prints the image from the displayed data

The Ultrasound Machine



The Ultrasound Machine

■ Transducer probe

- probe that sends and receives the sound waves



The Ultrasound Machine

Display Unit: Displays the image from the ultrasound data processed by the CPU



The Ultrasound Machine

Keyboard/cursor: Input data and take measurements from the display



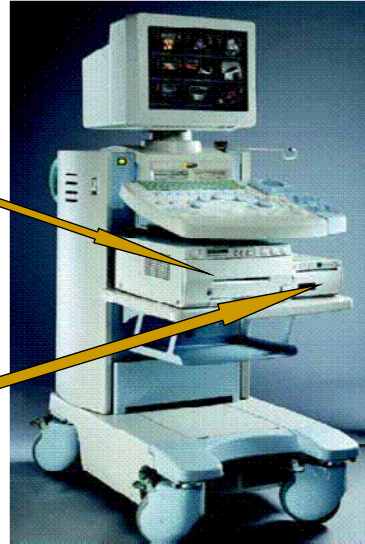
The Ultrasound Machine

Disk storage device: (CD/DVD
Hard Drive)

- stores the acquired images

Printer

prints the
image from the
displayed data



What the images look like...

The Ultrasound Images



Profile of fetal face 2nd trimester

The Ultrasound Images



Transvaginal ultrasound uterus with 6 week gestational sac before appearance of embryo

The Ultrasound Images



Fetal Profile – 1st Trimester

The Ultrasound Images



Sextuplets – 1st Trimester

Let's start at the beginning...

In the world of Obstetrics, Maternal Fetal Medicine (MFM)/Perinatology is a sub-specialty that is focused on the fetus, and its growth during the pregnancy.

Perinatology specialists work closely with obstetricians, and genetic counselors to provide care for high risk pregnancies, and to provide screening services for potential fetal anomalies prior to birth.

The perinatal period is generally defined as the time from 8-12 weeks gestation to approximately 30-45 days after delivery.

Background information

- MFM/perinatal specialists provide extensive care for
 - High risk pregnancies
 - Multiple gestation (twins, triplets etc)
 - In-vitro fertilization pregnancies (IVF)
 - Advanced maternal age (AMA)
 - Chronic maternal diagnoses (i.e. hypertension, diabetes, seizure disorder)

Background information

- Perinatologists perform and provide extensive ultrasound procedures with interpretation of:
 - Fetal growth and/or anomalies
 - Placenta location and/or anomalies
 - Amniotic fluid
 - Umbilical cord complications during the pregnancy

Background information

- MFM Perinatologists provide highly complex surgical fetal ***procedures*** performed in-utero such as:
 - Chorionic Villus Sampling (CVS)
 - Amniocentesis (Amnio)
 - Percutaneous umbilical cord blood sampling procedure (PUBS) also known as a cordocentesis

Background information

The ultrasound has become a standard procedure used during pregnancy. It can demonstrate fetal growth and can detect increasing numbers of **conditions** in the fetus:

- Congenital heart disease
- Kidney abnormalities
- Hydrocephalus
- Anencephaly
- Club feet and other anomaly/deformities.

CPT® Ultrasound Codes

CPT® has outlined the obstetrical codes within the code series 76801 - 76828

- codes include traditional ultrasound
- fetal biophysical profile(s)
- doppler velocimetry of the fetal umbilical and middle cerebral artery
- echocardiography of the fetus.

Conquering the Ultrasound Criteria

According to the guidelines in CPT® all diagnostic ultrasounds require

- a permanently recorded image
- a final written report.

Conquering the CPT Ultrasound Criteria

Coders need to fully understand if they are billing and coding ultrasound scans as:

- A) Global or complete scan
- B) The recorded image or technical component only (TC Modifier)
- C) The interpretation/documentation only of the ultrasound scan (26 Modifier)

Conquering the CPT® Ultrasound Criteria

Carefully review the CPT code definitions to determine if the CPT code itself specifies for the *first* or *single* gestation

– such as found in CPT code 76801

76801 – Ultrasound, pregnant uterus, real time with image documentation, fetal and maternal evaluation, first trimester (<14 weeks 0 days), transabdominal approach; single or first gestation.

Conquering the CPT® Ultrasound Criteria

- Check if the add-on code "⊕" symbol is denoted at the beginning of the CPT code
- do not use a 51 modifier with the ⊕ symbol code, as per the CPT definitions of an 'add on code'

Conquering the CPT® Ultrasound Criteria

- Review code 76802 to understand how the add-on code is used to denote 'each additional gestation'
- Code 76802 is an add-on code to CPT code 76801
- Definition: **+** 76802, each additional gestation (List separately in addition to code for primary procedure)

Conquering the CPT® Ultrasound Criteria

- If the CPT ultrasound code criteria does not specify 'units' (such as in the code 76815) it should never be billed as a multiple unit, only as a single unit
- CPT Code 76815 states 1 or more fetuses within the guidelines,
 - so only 1 unit would be appropriate... even though more than 1 fetus may be documented

Conquering the CPT® Ultrasound Criteria

CPT ultrasound code 76816 set does not specify 'units' so it can be used for multiple gestations.

Add the modifier 59 for each additional fetus when reporting:

76816 for baby A,

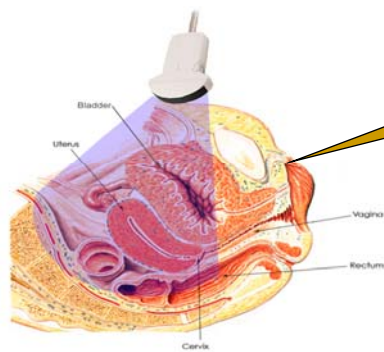
76816-59 for baby B.

Conquering the CPT® Ultrasound Criteria

- Review codes carefully to determine **if a trimester has been specified** within the ultrasound code set
 - **as in code 76805** *Ultrasound, pregnant uterus, real time with image documentation, fetal and maternal evaluation, after first trimester (> or = 14 weeks 0 days), transabdominal approach; single or first gestation*
 - **as in code 76801** *Ultrasound, pregnant uterus, real time with image documentation, fetal and maternal evaluation, first trimester (< 14 weeks 0 days), transabdominal approach; single or first gestation*

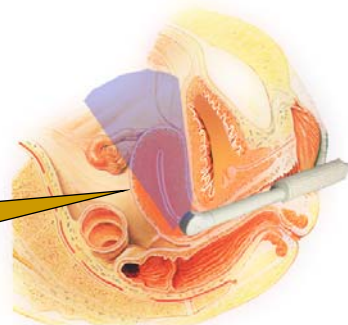
Conquering the CPT® Ultrasound Criteria

- Review to determine the **approach** of how the ultrasound was performed
 - CPT Code 76817 Ultrasound, pregnant uterus, real time with image documentation, **transvaginal approach**
 - CPT Code 76811 Ultrasound, pregnant uterus, real time with image documentation, fetal and maternal evaluation plus detailed fetal anatomic examination, **transabdominal approach**; single or first gestation
 - CPT code 76813 Ultrasound, pregnant uterus, real time with image documentation, first trimester fetal nuchal translucency measurement, **transabdominal OR transvaginal approach**; single or first gestation



TRANSABDOMINAL
VIEW ILLUSTRATION

TRANSVAGINAL
VIEW ILLUSTRATION



Deciphering the Terminology

- In MFM/Perinatology medicine, there are many strange words and procedures
- a coder needs a good understanding of ultrasound terminology & clinical documentation
- Standard Medical Dictionary Reference
- Standard Medical Abbreviations Reference

Abbreviations/Terminology

| Term | Abbreviation | Definition |
|-------------------------------|---------------|--|
| Amniocentesis | Amnio | A procedure to draw a sample of amniotic fluid which is then analyzed to detect chromosome abnormalities, structural defects and metabolic disorders. |
| Amniotic Fluid | Amnio Fluid | The fluid in which the embryo or fetus is suspended within the womb (the embryonic sac inside the uterus). |
| Beats per minute | bpm | the number of heartbeats per unit of time (beats per minute) |
| Chorionic Villus Sampling | CVS | An alternative to amniocentesis to detect chromosomal abnormalities. The CVS can be performed earlier in fetal development than amniocentesis, and thereby allows earlier diagnosis. |
| Congenital Defect | | A problem or condition existing at or dating from birth; acquired during development in the womb (uterus) and not through heredity |
| Crown Rump Length | CRL | the ultrasound measurement of a fetus |
| Diagnostic Fetoscopy | | A minimally-invasive examination of the fetus by a miniature video camera inserted through a small tube |
| Estimated Date of Confinement | EDC | a term for the estimated delivery date for a pregnant woman |
| Fetal Abnormality | | A condition detected in the unborn human that is not the normal or average. |
| Fetal Echocardiography | | A high resolution ultrasound test to detect heart abnormalities in the fetus. |
| Fetal Pole | | a thickening on the margin of the yolk sac of a fetus during pregnancy |
| Genetic Counseling | | Medical guidance concerning inherited (genetic) disorders. |
| In Utero | | Relating to being in the womb. |
| Intra-Uterine Pregnancy | IUP | the normal location for a pregnancy to occur |
| In-vitro Fertilization | IVF | a process by which egg cells are fertilized by sperm outside the body |
| Last Menstrual Period | LMP | the first day of the menstrual period prior to conceiving, used to calculate Expected Date of Delivery |
| Magnetic Resonance Imaging | MRI | A noninvasive diagnostic technique that produces computerized images of internal body tissue induced by the application of radio waves |
| Maternal Fetal Medicine | MFM | The testing and management of high-risk pregnancies; also called perinatology. |
| Neonatal Intensive Care Unit | NICU | An area within a hospital dedicated to the care and treatment of pre-term and critically ill babies |
| Neural Tube Defect | NTD | an opening in the spinal cord or brain that occurs very early in human development, visualized by ultrasound |
| Nuchal Translucency | NT | The area around the neck of the fetus, also known as the nuchal fold |
| Postnatal | | Occurring, existing or performed after birth |
| Prenatal | | Occurring, existing or performed before birth |
| Trans-abdominal ultrasound | TAUS | Ultrasound procedure performed to visualize the pelvic cavity through application of sound waves by a device placed upon the abdomen |
| Trans-Vaginal ultrasound | TVUS | Ultrasound procedure performed to visualize the cervix and uterine contents by application of sound waves through a device inserted into the vagina. |
| Trimester | | the division of pregnancy into three-month sections |
| Ultrasound | US or U/sound | A technique involving the formation of a 2D-or 3D dimensional image used for the examination and measurement of bodily abnormalities. |

Code Set Criteria

- Detail of the Ultrasound Code
 - CPT Definition & Guidelines
- Documentation Criteria Needed
 - Clinical Indications (Diagnosis)
 - Pre-Service Work
 - Intra-Service Work
 - Post-Service Work
- Static/Video Ultrasound Record
 - Permanent Recorded Image

Pre-Service Work :

- Chart Review of prior clinical information
- Review of pertinent prior imaging studies
- Proper Draping & Positioning of the Patient

Intra Service Work

Work involved in performing the actual scan

- Always includes the physical performance of the scan by the provider or sonographer
- If performed by a sonographer – Supervision of the sonography
- Standard Clinical work detail criteria noted (Key elements) and of the actual scan findings
- Interpret and prepare report for the Permanent Medical Record (electronic or paper)

Post-Service Work :

- Discuss the findings with the patient and referring physician (when appropriate)
- Review and sign the permanent record/prepared report

Code-Set Specifics Most Common Fetal Ultrasounds

- 76801 +76802
- 76815
- 76805 +76810
- 76816
- 76811 +76812
- 76817

CPT® Code-Set Specifics

76801: Ultrasound, pregnant uterus, real time with image documentation, fetal and maternal evaluation, first trimester (< 14 weeks 0 days), transabdominal approach; single or first gestation

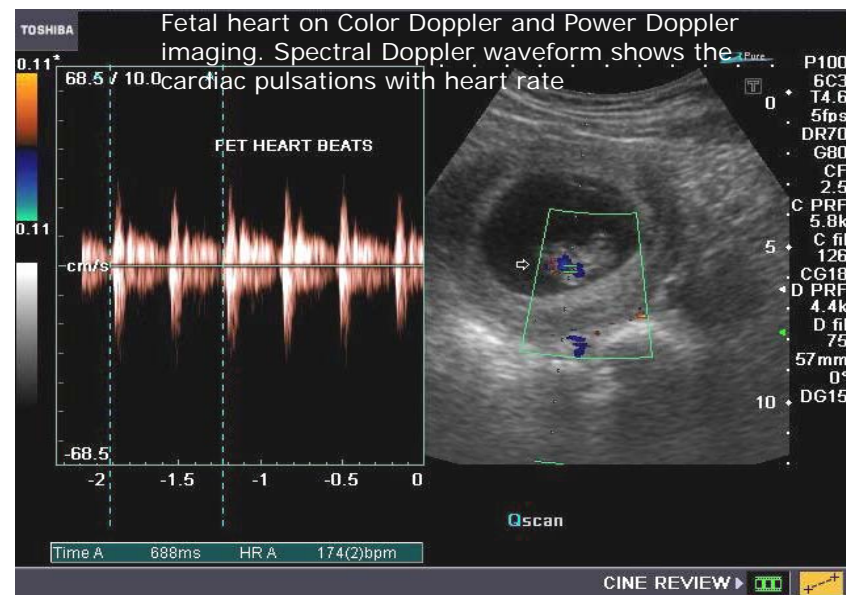
+ 76802: Ultrasound, pregnant uterus, real time with image documentation, fetal and maternal evaluation, first trimester (< 14 weeks 0 days), transabdominal approach; Each additional gestation (List separately in addition to code for primary procedure)

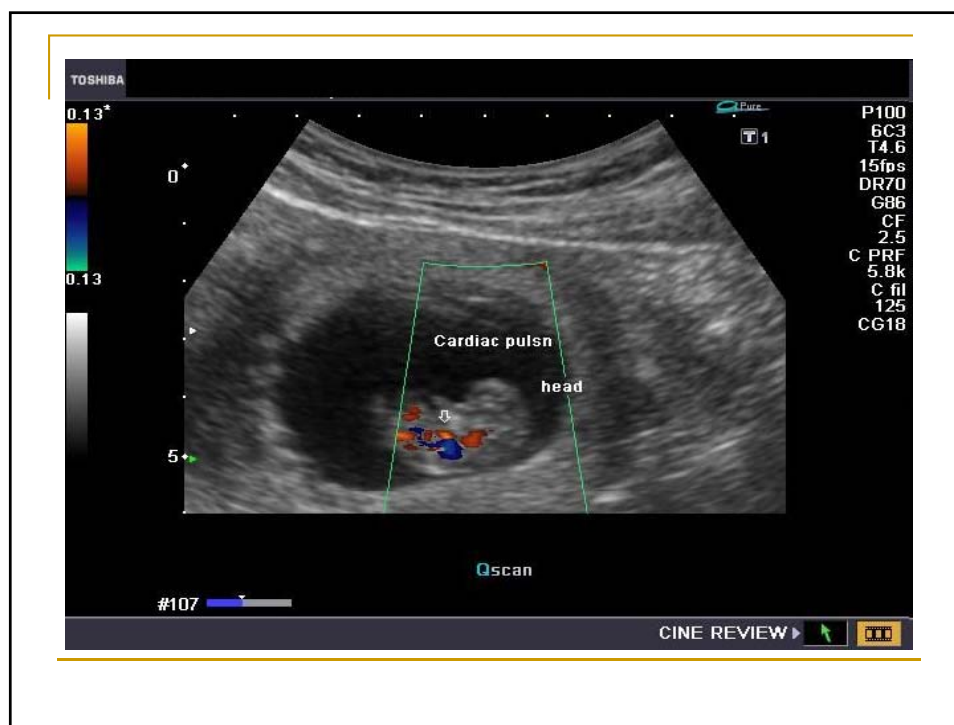
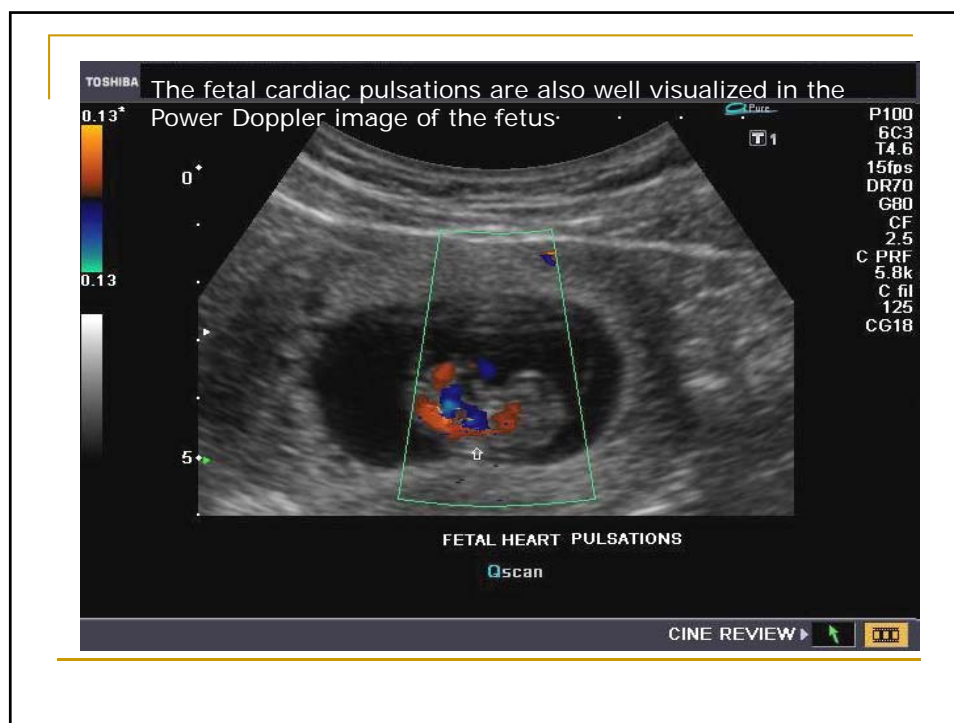
76801-76802 Ultrasound First Trimester Key Elements

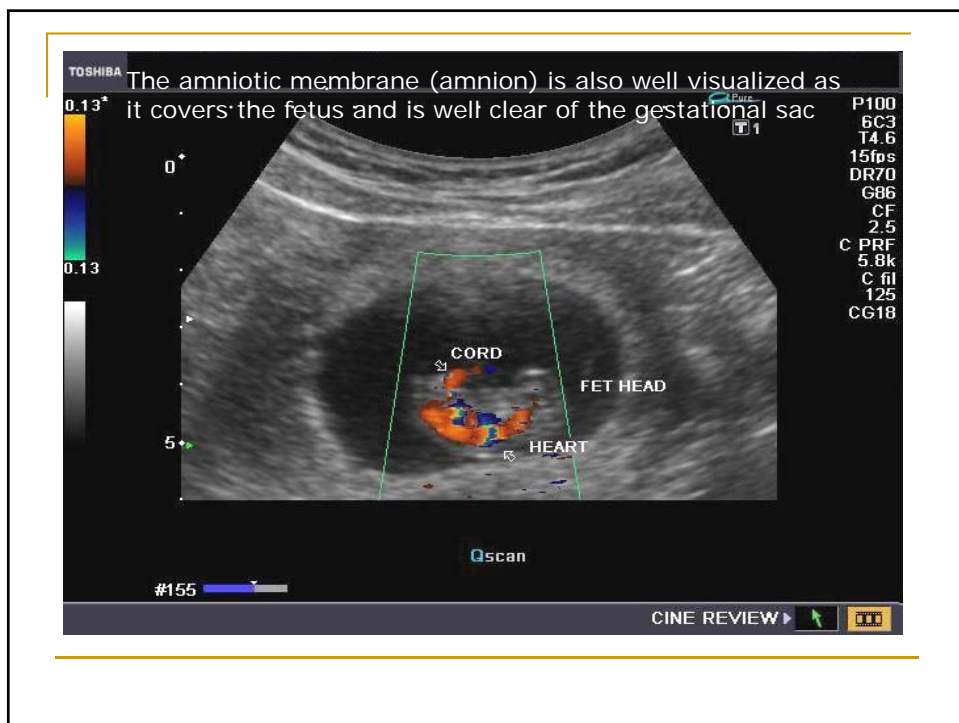
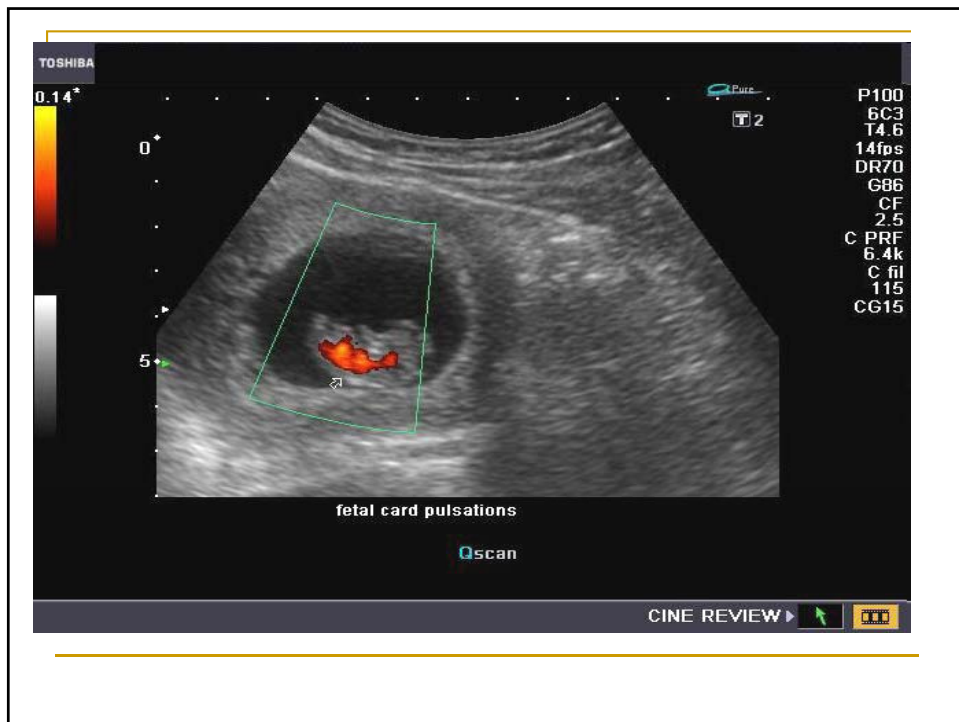
- Determination of the number of gestational sacs and fetuses
- Gestational sac/fetal measurement appropriate for gestation
- Survey of visible fetal and placental anatomic structure
- Qualitative assessment of the amniotic fluid volume
- Evaluation of maternal uterus and adnexa

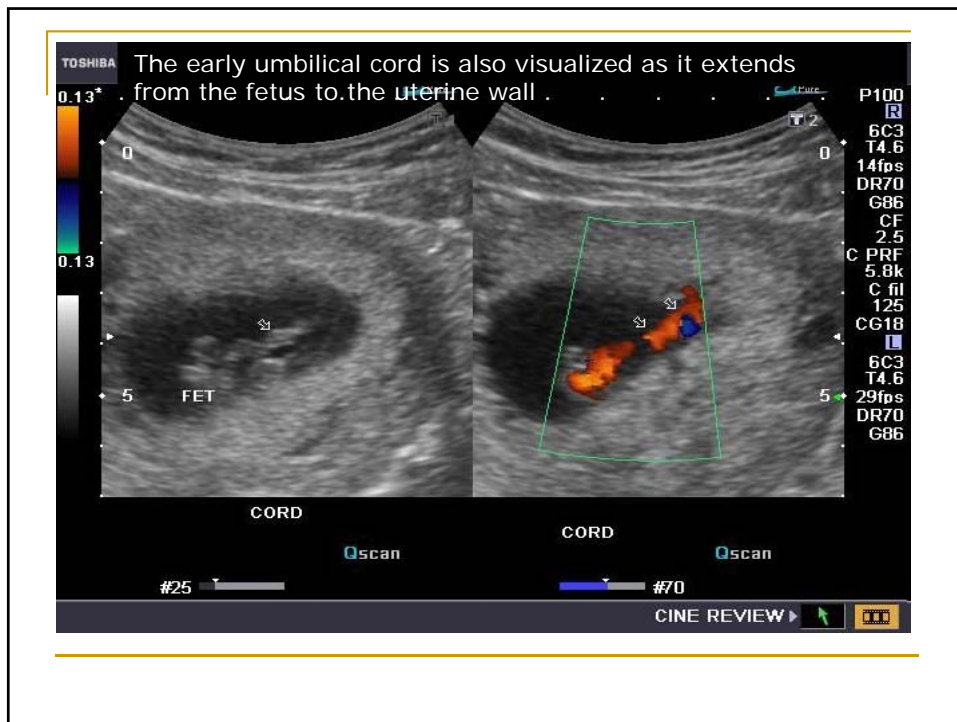
76801-76802 Key Elements

- These ultrasound images show a normal early fetus of 9 weeks gestational age (1st trimester) and are taken via the transabdominal route.
- Among the structures seen are the fetus with the bulkier head (cephalic part) and the fetal heart on Color Doppler and Power Doppler imaging.
- Spectral Doppler waveform (Topmost row- right) shows the cardiac pulsations with heart rate.
- The fetal cardiac pulsations are also well visualized in the Power Doppler image of the fetus (2nd row from bottom- Right).
- The amniotic membrane (amnion) is also well visualized as it covers the fetus and is well clear of the gestational sac (Topmost row -left).
- At a later date, the amnion merges with the gestational sac and would not be visualized. The early umbilical cord is also visualized as it extends from the fetus to the uterine wall (ultrasound/ Doppler image on bottom row).









CPT® Code-Set Specifics

76805: Ultrasound, pregnant uterus, real time with image documentation, fetal and maternal evaluation, first trimester (> or = 14 weeks 0 days), transabdominal approach; single or first gestation

+ 76810: Ultrasound, pregnant uterus, real time with image documentation, fetal and maternal evaluation, first trimester (> or = 14 weeks 0 days), transabdominal approach; Each additional gestation (List separately in addition to code for primary procedure)

76805, +76810 After First Trimester Key Elements

- Determination of the number Fetuses
amniotic/chorionic sacs
- Survey of intracranial, spinal and abdominal anatomy
- Evaluate the 4-chamber heart view
- Assessment of the umbilical cord insertion site
- Assessment of the amniotic fluid volume
- Evaluation of maternal adnexa when visible

Second Trimester View

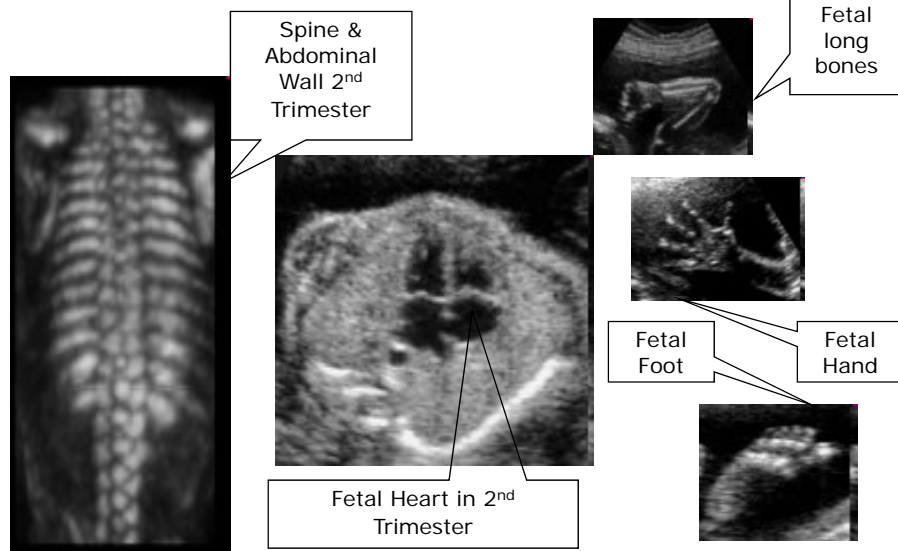


CPT® Code-Set Specifics

76811: Ultrasound, pregnant uterus, real time with image documentation, fetal and maternal evaluation, plus detailed fetal anatomic examination, transabdominal approach, single or first gestation

+ 76812: Ultrasound, pregnant uterus, real time with image documentation, fetal and maternal evaluation, plus detailed fetal anatomic examination, transabdominal approach, each additional gestation (list separately in addition to code for primary procedure)

Fetal Anatomic Features



CPT® Code-Set Specifics

76815: Ultrasound, pregnant uterus, real time with image documentation, limited (e.g., fetal heart beat, placental location, fetal position and/or qualitative amniotic fluid volume), 1 or more fetuses

76815 Limited Ultrasound Key Elements

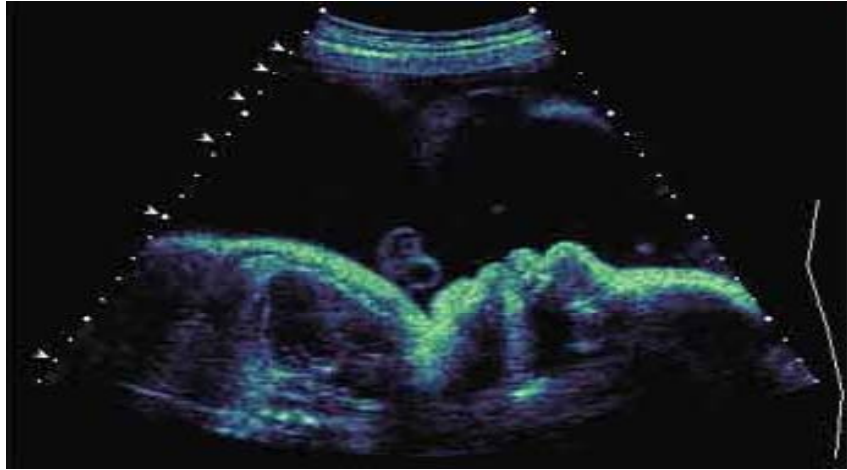
Examination is limited for a focused “quick-look/quick-peek” assessment of one or more of these key elements

- Fetal Position
- Fetal Heartbeat
- Placental location
- Qualitative amniotic fluid volume

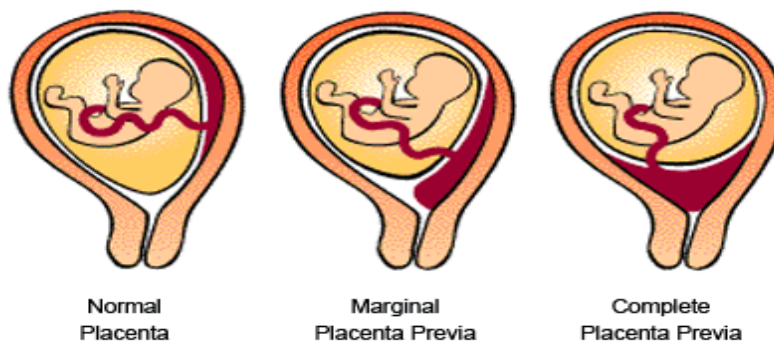
Note: If an AFI only is noted/performed in the record
– this is the CPT code/scan that should be billed

Moderate Polyhydramnios:

increased or excessive amniotic fluid volume



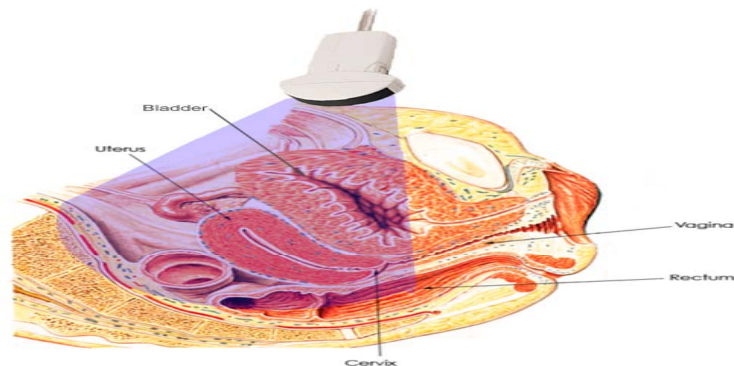
Placenta Previa Illustration



CPT® Code-Set Specifics

76816: Ultrasound, pregnant uterus, real time with image documentation, follow-up (e.g., re-evaluation of fetal size by measuring standard growth parameters and amniotic fluid volume, re-evaluation of organ system(s) suspected or confirmed to be abnormal on a previous scan), transabdominal approach, per fetus

Transabdominal View



76816 Follow-Up Ultrasound Key Elements

Examination is limited to the following elements

- Focused Assessment of fetal size by measuring BPD (Bi-Parietal Diameter), abdominal circumference, femur length or other appropriate measurement

OR

- Detailed re-examination of a specific organ or system known or suspected to be abnormal
- Comparison of this examination to a prior study to evaluate the interval change (i.e. fetal growth)

INDICATIONS/DIAGNOSIS: Fetal Anomaly, known or Suspected

RESULTS:

Fetus # 1 of 1 Vertex presentation Placenta Location = Anterior No placenta previa Placenta Grade = I

AMNIOTIC FLUID: AFI Total = 3.6 cm The amniotic fluid volume appears to be normal

MEASUREMENTS *Indicates Measurement Included In Average Gestational age

BPD 6.3 cm 25 weeks 4 days* (51%) HC 23.3 cm 25 weeks 1 day* (38%)

AC 21.8 cm 26 weeks 1 day* (61%) Femur 4.6 cm 25 weeks 3 days* (43%)

Humerus 4.1 cm 24 weeks 6 days (36%) HC/AC 1.07 FL/AC 0.21 FL/BPD 0.73

EFW(AC/FL/HC) 851 grams - 1 lbs 14 oz (55%)

THE AVERAGE GESTATIONAL AGE is 25 weeks 4 days +/- 14 days.

CERVICAL EVALUATION/CERVICAL EXAMINATION

Cervical Length: 3.21 cm

ANATOMY: Head Normal Th. Cav. Normal Heart See Details

Stomach Normal Right Kidney Normal Left Kidney Normal

Bladder Normal Genitalia Normal Placenta Normal

ANATOMY DETAILS

Visualized Appearing Sonographically Normal:

STOMACH, RIGHT KIDNEY, LEFT KIDNEY, BLADDER, GENITALIA, PLACENTA,

HEAD: (Calvarium, BPD Level, Lateral Ventricles, Choroid Plexus, Cerebellum, Cisterna Magna); TH. CAV.: (Lungs,

Diaphragm); HEART: (Four Chamber View, Proximal Left Outflow, Proximal Right Outflow, Distal Left Outflow, Distal

Right Outflow, Cardiac Axis, Interventricular Septum, Cardiac Position)

IMPRESSION: Singleton IUP

28 weeks and 2 days by dates. (EDD=FEB 28 2012)

25 weeks and 2 days by 1st Tri Sono. (EDD=MAR 20 2012)

25 weeks and 4 days by this ultrasound. (EDD=MAR 18 2012)

Vertex presentation Estimated Fetal Weight = 851 grams Estimated Fetal Weight = 1 lbs 14 oz No placenta previa

RECOMMENDATION: Ultrasound: As indicated

GENERAL COMMENT: Patient is seen in follow up of ICEF. Her sequential screen returned normal. Fetal growth is appropriate and no abnormalities noted. Repeat cardiac anatomy is normal; a full fetal echo was not performed as the ICEF is not associated with an increased risk for CHD and the 6 standard views are normal. The ICEF and serum screen results were reviewed and patients questions answered. Clinical follow up was discussed.

CPT® Code-Set Specifics

76817: Ultrasound, pregnant uterus, real time with image documentation, transvaginal

76817 Transvaginal Ultrasound Key Elements

Interpretation of the examination including ANY of the following elements

- Evaluation of the fetus and placenta
- Evaluation of the maternal uterus and adnexa
- Evaluation of characteristics of cervix including length and structure

Transvaginal view: embryo at 10 weeks



Code-Set Specifics
Targeted & Procedural Fetal Ultrasounds

- 76818 BPP w/NST
- 76819 BPP w/o NST
- 59025 Fetal NST
- 76820 Umbilical Artery Doppler
- 76821 Mid-Cerebral Artery Doppler

Code-Set Specifics Targeted Fetal Ultrasound Testing

- **76818** Bio-Physical Profile (BPP) with Fetal Non-Stress Test (NST)
- **76819** Bio-Physical Profile (BPP) without Fetal Non-Stress Test (NST)

CPT® Code-Set Specifics

76818: Fetal bio-physical profile; with non-stress testing

76819: Fetal bio-physical profile; without non-stress testing

76818/19 Bio-Physical Profile Key Elements

Interpretation of the examination 76818

Performed to assess the physiologic status of the fetus (and scored)

- Fetal Breathing movements (score: 0-2)
- Fetal Movement (score: 0-2)
- Fetal Tone (score: 0-2)
- Amniotic Fluid Volume (score: 0-2)
- Final Score documented on interpretation
- Fetal Non-Stress Test (score: 0-2)

Note: for code 76819 – no NST is performed

76819 Follow-Up Ultrasound Key Elements

The LMP of this 31 year old, gravida 1, para 0 patient was MAY 3 2011, giving her an EDD of FEB 7 2012 and a current gestational age of 33 weeks 1 day by dates. A sonographic examination was performed on DEC 21 2011 using real time equipment.

The amniotic fluid volume for fetus A appears to be normal. The amniotic fluid volume for fetus B appears to be normal.

INDICATIONS: Twins

RESULTS

Fetus # 1 of 2

Vertex presentation

Fetal growth appeared normal

Fetal position = Maternal Left

Placenta Location = Right lateral

No placenta previa

Placenta Grade = II

Chorionicity = Monochorionic, Diamniotic

BIOPHYSICAL PROFILE

Fetus A

The Biophysical Profile score was 8/8.

Breathing: 2 Movement: 2 Tone: 2 AFV: 2

Fetus B

The Biophysical Profile score was 8/8.

Breathing: 2 Movement: 2 Tone: 2 AFV: 2

IMPRESSION

Twin IUP (Fetus A)

33 weeks and 1 day by dates. (EDD=FEB 7 2012)

33 weeks and 1 day by this ultrasound. (EDD=FEB 7 2012)

Fetal position = Maternal, Left Vertex presentation

Fetal growth appeared normal

Estimated Fetal Weight = 2032 grams

Estimated Fetal Weight = 4 lbs 8 oz

No placenta previa

Monochorionic, diamniotic

Twin IUP (Fetus B)

33 weeks and 1 day by dates. (EDD=FEB 7 2012)

32 weeks and 6 days by this ultrasound. (EDD=FEB 9 2012)

Fetal position = Superior, Right Transverse presentation

Fetal growth appeared normal

Estimated Fetal Weight = 2015 grams

Estimated Fetal Weight = 4 lbs 7 oz

No placenta previa

Monochorionic, diamniotic

RECOMMENDATION: BPP: 1 Week

GENERAL COMMENT: Patient is seen in follow up of MC twins.

She is without problems. Fetal growth remains appropriate and concordant, with concordant MVPs. MCA dopplers for Twin B are stable and at median for gestational age. Twin A's MCA could not be accurately insonated. Fetal testing is normal for both fetuses.

I reviewed considerations for delivery with patient and her husband given the ongoing risks for morbidity and mortality with MC twins. Will continue weekly surveillance and MCA dopplers until delivery.

CPT® Code-Set Specifics

59025 Fetal Non-Stress Test

59025 Fetal Non-Stress Test Key Elements

The NST can be performed in conjunction with
or without the Bio-Physical Profile

- Global Procedure 59025
- Interpretation only Procedure 59025-26
- Technical Component Only Procedure 59025-TC

59025 Fetal Non-Stress Test Key Elements

The NST is performed by auscultation of the fetal heart rate using an external electronic monitor attached to the pregnant patient.

Documentation needs to include

- Baseline Fetal Heart Rate (FHR)
- Baseline FHR Variability
- Presence of Accelerations
- Presence of Periodic or episodic Decelerations
- Changes or Trends of FHR pattern over time (30 minutes minimum)
- Frequency and intensity of uterine contractions

59025 Fetal Non-Stress Test Key Elements "Stand Alone NST"

The screenshot displays a medical software window titled "Centricity Perinatal - Perinatal User View". The user is "Lori Lynne Webb (Secretary)" and the date is "11/11/11 13:00". The window contains a form for an "NST Record" dated "11/9/2011 15:15".

NST Information

Date: 11/9/2011 15:15

Time on Monitor: 11/09/11 15:15 MST
Time off Monitor: 11/09/11 15:36 MST
Test Number: 4
Test Duration (Minutes): 21
Test/Monitor Explained: Monitor Explained, Test Explained, Patient Verbalized Understanding
Test/Monitor Explained Other: EDC: 11/11/11
Gestational Age: 39.5
Temperature: Pulse: 102 Resp: 16 BP: 110 / 70
Urine Protein: Negative
Urine Glucose: Normal
Urine Ketones: Negative
Urine Blood: Negative
Reason for NST: Intrauterine Growth Restriction
Other Reason for NST:
Patient States Fetal Movement:
Name of Physician Notified: Bouchard
Time Notified: 11/09/11 15:36 MST
Orders Received: Yes, see chart
Patient Disposition: Discharged Home

Patient States Fetal Movement:

FHR Baseline: 130
Variability: Moderate 6-25bpm
Accelerations: 15X15
Decelerations: None
Contraction Frequency: None
NST Interventions: PO Hydration
NST Interventions Other:
NST Results: Reactive
NST Results Other:
Comments:
NST Reviewed and Verified by: E. [signature]

Code-Set Specifics Targeted Fetal Ultrasound Testing

- **76820** Doppler velocimetry fetal; umbilical artery
- **76821** Doppler velocimetry fetal; middle cerebral artery

CPT® Code-Set Specifics

76820 Doppler Velocimetry, Fetal; Umbilical Artery

76820 Doppler Key Elements

Interpretation of the examination 76820

- Study is performed to assess the velocity of the blood flow through the umbilical artery.
- Velocity waveforms through the umbilical artery of a normal fetus are different from a growth-retarded fetus.
- Can be performed either transabdominally or transvaginally.

CPT® Code-Set Specifics

76821 Doppler velocimetry,
Fetal; Middle Cerebral Artery

76821 Doppler Key Elements

Interpretation of the examination 76821

- Study is performed to assess the velocity of the blood flow through the Middle Cerebral artery.
- The peak systolic velocity is inversely related to the amount of hematocrit (HCT) in fetal blood
- Helps to determine the timing of labor induction or when fetal anemia is severe enough to require a transfusion
- Can be performed either transabdominally or transvaginally

76820 Umbilical
Artery

76821 Middle
Cerebral Artery

The LMP of this 29 year old G5P2 patient was unknown. Her working EDD is 12.04.2011 current Gestational Age is 37 weeks 1 day by 1st Trimester Sono. A sonographic examination was performed on 11.14.2011 using real time equipment.

INDICATION:
Suspected IUGR

Fetus 1 of 1
Vertex Presentation
Placenta Location = Posterior
No Placenta Previa
Placenta Grade = II

| FETAL VESSELS | S/D | PI | RI | PSV Cm/S | AEDV RF |
|------------------------|------|----|----|-------------|---------|
| Umbilical Artery | 3.50 | | | | |
| Middle Cerebral Artery | | | | 58.00 | |

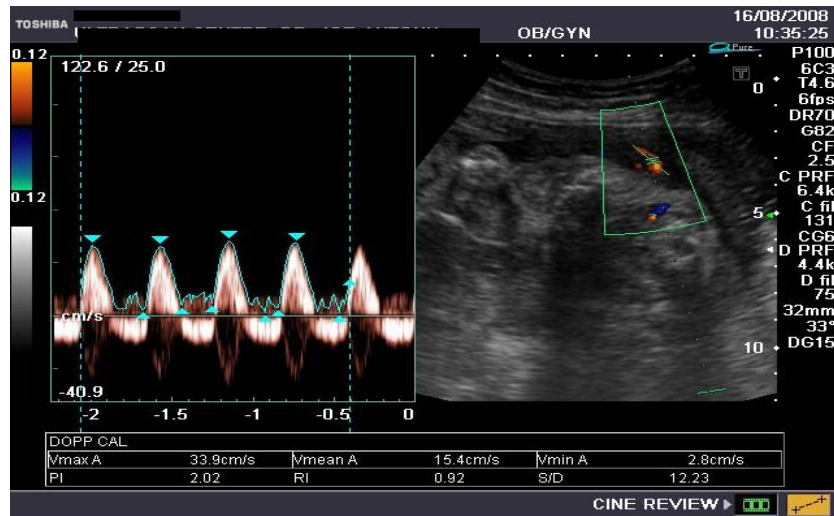
| AMNIOTIC FLUID | Q1 | Q2 | Q3 | Q4 |
|--------------------|-----|-----|-----|-----|
| AFI Total = 8.9 CM | 3.2 | 2.2 | 0.7 | 2.7 |

| ANATOMY | |
|--------------|-------------|
| Head | See Details |
| Stomach | Normal |
| Right Kidney | Normal |
| Left Kidney | Normal |
| Bladder | Normal |
| Placenta | Normal |

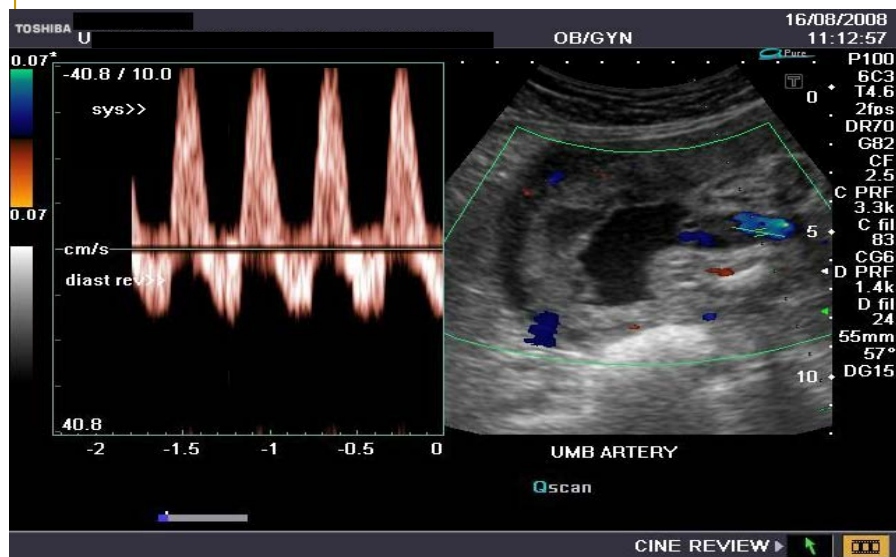
ANATOMY DETAILS:
Visualized Appearing Sonographically Normal:
STOMACH, RIGHT KIDNEY, LEFT KIDNEY, BLADDER, PLACENTA,
HEAD: (Calvarium, BPD level)

IMPRESSION: Singleton IUP 37 weeks and 1 day by 1st Tri Sono. (EDD=Dec 4 2011)
Vertex Presentation No Placenta Previa
Patient is seen in follow up of suspected IUGR, Patient has had good fetal movement.
Fetal Testing is normal. Growth scan repeat in 1 week.

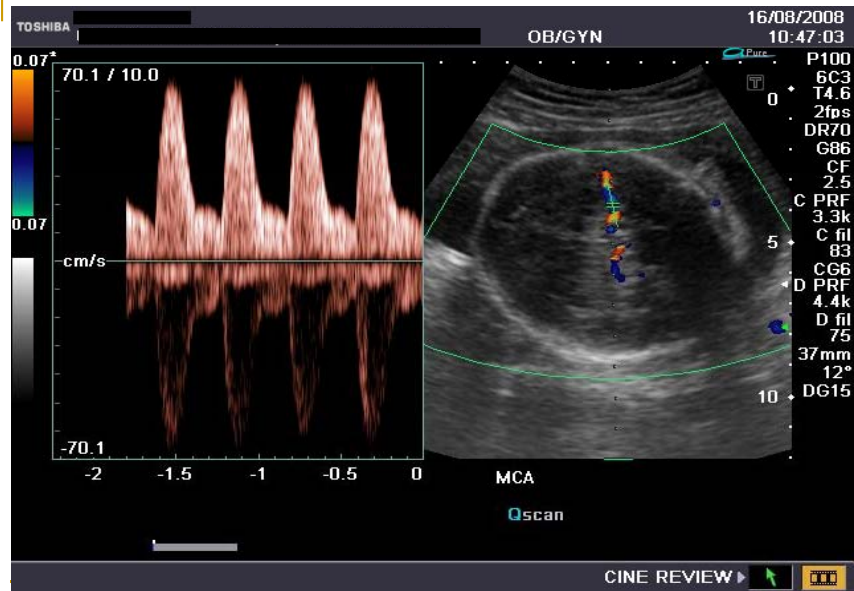
Doppler of umbilical artery



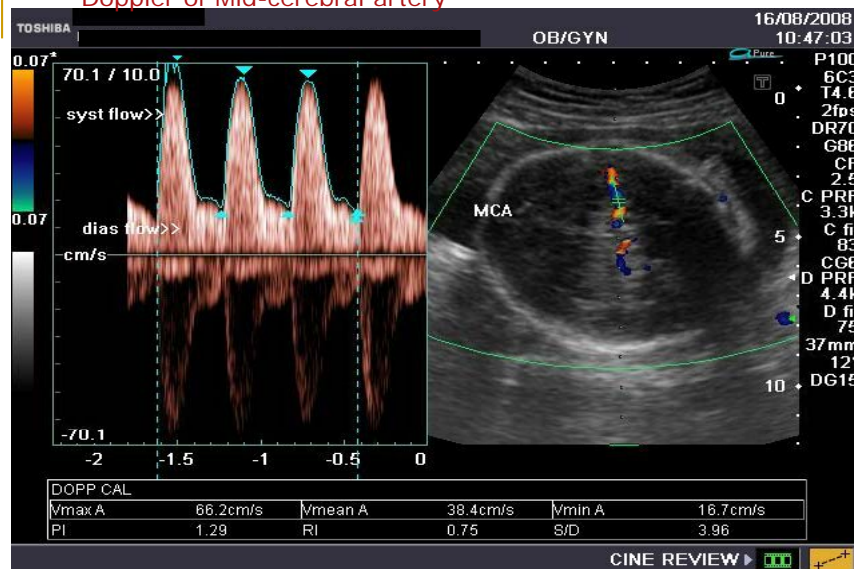
Doppler of umbilical artery



Doppler of Mid-cerebral artery



Doppler of Mid-cerebral artery



Cordocentesis: PUBS Procedure

Percutaneous Umbilical Blood Sampling

- An advanced imaging ultrasound determines the location where the umbilical cord inserts into the placenta.
- The ultrasound guides a thin needle through the abdomen and uterine walls to the umbilical cord. The needle is inserted into the umbilical cord to retrieve a small sample of fetal blood.
- The sample is sent to the laboratory for analysis, and results are usually available within 72 hours.

When is cordocentesis performed?

- Cordocentesis is usually done when diagnostic information can not be obtained through amniocentesis, CVS, ultrasound or results of above tests were/are inconclusive.
- Cordocentesis is performed after 17 weeks into pregnancy.
- Entire procedure takes approx. 45-60 minutes to perform due to the fragility of the umbilical vein.

What does the cordocentesis test look for?

- Cordocentesis detects chromosome abnormalities and/or blood disorders
- Cordocentesis may be performed to help diagnose any of the following :
 - Malformations of the fetus
 - Fetal infection (i.e. toxoplasmosis or rubella)
 - Fetal platelet count in the mother
 - Fetal anemia
 - Isoimmunization

<http://www.youtube.com/watch?v=Hg10v0Pa5Sc>

The Amniocentesis Procedure

Amniocentesis Background

- During the pregnancy, the uterus houses and protects a developing fetus for about 9 months. The fetus is surrounded by fluid, which in the 2nd and 3rd trimester is produced primarily by fetal urination also known as amniotic fluid. .
- Amniotic fluid, allows the fetus to float and move within the uterus. It also cushions and protects the fetus from injury and helps to maintain a constant temperature in the uterus.
- Pregnant women who are over 35 or have a family history of genetic disorders may undergo a procedure called an amniocentesis.
- The Amniocentesis procedure is used to test for infections, genetic disorders, metabolic problems, and fetal lung maturity, sex of the infant.

The Amniocentesis Procedure itself...

- During the procedure, the position of the fetus is first located using ultrasound guidance.
- The ultrasound locates a safe place for aspiration that is away from the placenta.
- Aspiration of fluid from the amniotic sac is performed, via a needle inserted through the skin of the abdomen. Approximately 1 ounce of amniotic fluid is withdrawn.
- Following the procedure, the fetus will be monitored by ultrasound for a brief period. And, the amniotic fluid will be naturally replaced in about 3 to 4 hours.

CPT® Code-Set Specifics

Amniocentesis: 59000/59001

- Coding for the Amniocentesis involves codes:
 - 59000 Amniocentesis Diagnostic. (Medicine code)
 - 76946 The Ultrasound guidance of the test
 - 59001 Amniocentesis for Therapeutic Fluid Reduction (includes ultrasound guidance)

The Amniocentesis Procedure

Amniocentesis animation video.flv

Amniocentesis video 01082012.flv

THANK YOU!!!

- I appreciate you spending this time with me, I hope you enjoyed it as much as I enjoyed bringing this to you.

References

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