

AUSTIN RADIOLOGICAL ASSOCIATION
ULTRASOUND PROTOCOLS

Procedure Name: Biophysical Profile

Updated 9/24/19

Indications:

A biophysical profile (BPP) includes ultrasound monitoring of fetal movements, fetal tone and fetal breathing, ultrasound assessment of amniotic fluid volume with the fetal heart rate. The BPP is performed in an effort to identify fetuses that may be at risk of poor pregnancy outcome and for any other valid medical reason.

General Description:

This is a well-being survey of a fetus(s). It is an observation in order to better determine which fetus(s) are potentially compromised and which are not.

Patient Preparation:

The patient's urinary bladder must be adequately distended in order to evaluate the cervical os. This typically requires drinking at least 24oz. to 32oz. of water 1 hour prior to the exam.

Equipment Selection and Settings:

A curvilinear transducer will be used for most patients. The sonographer should use the preprogrammed OB setting and adjust gain, depth, and transmit zone settings to optimize images.

Imaging Sequence:

Identify, document, and/or measure the following if present:

- Presence and number of fetus(s).
- Cardiac activity, fetal heart rate.
- Amniotic fluid index
- Fetal tone and movement
- Fetal breathing can be demonstrated with M-mode over the chest wall or color on the nostrils

Variable	Score 2	Score 0
Fetal posture and tone (FT)	1 episode of active extension with return to flexion of fetal limb(s) or trunk; opening and closing of hand considered normal tone	Slow extension with return to partial flexion, movement of limb in full extension, or absent fetal movement
Fetal movement (FM)	3 discrete body/limb movements in 30 minutes or less (episodes of active continuous movement considered as single movement)	Less than 3 episodes of body/limb movements in full 30 minutes
Fetal breathing movements (FBM)	1 episode of >30 seconds of FBM in 30 minutes or less	Absent or no episode of > 30 seconds in full 30 minutes
Amniotic fluid index (AFI); sum of four quadrants	AFI > 5.0 cm	AFI ≤ 5.0 cm