3D Pelvic Ultrasound

2D pelvic ultrasound has been established for several decades as the most reliable and effective way to image the uterus, ovaries and the surrounding structures. The recent advent of 3D pelvic imaging, specifically using a transvaginal approach, has been one of the most important advances in ultrasound over the last few years. In addition to producing transverse and longitudinal images of the pelvis (for example, the uterus), using a reconstructed image, the coronal view can be displayed for the first time, showing the exact shape of the uterine cavity with the relationship of the cornua to the cervix. This results in a new and enhanced capability of ultrasound to display uterine anatomy, so far only available using MRI.

How is 3D pelvic scanning performed?

The 3-D ultrasound examination is typically performed at the same time as the traditional 2D transvaginal scan using a probe that has both 2-D and 3-D ultrasound capabilities. This acquires a volume data set and this data set can then be manipulated and evaluated after the patient leaves the ultrasound room, by displaying images from the original volume in any orientation desired. This enables us to go over the images, not only in the original scan plane but also in any other scan plane desired, including planes which are not obtainable on standard 2D imaging.

What are the indications for 3D ultrasound?

Reasons for a 3-D pelvic ultrasound include:

- Assessment for developmental (congenital) uterine anomalies
- Investigation for causes of abnormal uterine bleeding such as polyps, submucous fibroids etc
- Investigation of misplaced intrauterine contraceptive device (IUCD)
- Possible causes of recurrent miscarriage
- Reasons for recurrent preterm births
- Causes of recurrent fetal malpresentations such as breech or transverse lie
- In conjunction with saline hysterography.