WRITING THE ULTRASOUND REPORT

15

INTRODUCTION

Writing the ultrasound report is an important and essential part of the ultrasound examination as it documents and records the study findings for the woman, for healthcare providers and other interested parties. The ultrasound report becomes part of the patient's medical record and is a permanent documentation of the ultrasound examination. National and international ultrasound societies have recommended that a permanent record of the ultrasound examination and its interpretation be generated. Images both normal and abnormal should be recorded in a retrievable format and that retention of such images and the report should be consistent both with clinical needs and with relevant legal and local health care facility requirements. The ultrasound report is therefore a way to communicate your findings to others and should be performed after each ultrasound examination.

COMPONENTS OF THE ULTRASOUND REPORT

Patient Characteristics

Patient characteristics and identifiers, such as her name, identification numbers, age or preferably date of birth, gravity and parity and date of last menstrual period are important components of the ultrasound report and should be included in its top section and easily identified. Patient identification numbers vary and may be assigned at the institution as medical record numbers and may not be essential in the low-resource (outreach) setting as long as the woman's date of birth or other identifier is available that can help in differentiating patients. Information with regards to the referring healthcare worker or clinic should also be included. Patient characteristics are needed for all reports being obstetrics or gynecology.

Indication for the Ultrasound Examination

An indication for the ultrasound examination should be entered in the report. Various indications for ultrasound examination in obstetrics and gynecology have been presented in previous chapters. Knowing the indication for the ultrasound examination is important as it may focus the examination on a target organ after the components of the ultrasound examination have been completed and may raise awareness for the presence of abnormalities. The readers should refer to previous chapters in this book for ultrasound study indications.

Obstetrics

The obstetric ultrasound report should include 3 essential components: basic information about the pregnancy, fetal biometric measurements and fetal anatomic details. Basic information about the pregnancy includes viability of the fetus, whether the gestational sac is intrauterine, the number of fetuses, the location of the placenta, ruling out a placenta previa, the assessment of the amniotic fluid and the presentation and lie of the fetus. Fetal biometric measurements should include the gestational sac if an embryo is not visualized, a crown-rump length up to 13 6/7 weeks of gestation, biparietal diameter, head circumference, abdominal circumference and femur length after 13 6/7 weeks of gestation. **Table 15.1** lists biometric measurements that should be included in a basic obstetric report (see chapters 4, 5 and 6 for more details). Fetal anatomy that needs to be listed in the obstetric report is based upon the type of ultrasound examination and the setting under which the ultrasound examination is performed. National and international societies have developed lists of fetal anatomy as part of the basic and detailed (advanced-targeted) obstetric ultrasound examination (1 - 4) (see chapters 5 and 6 for more details). In the low-resource (outreach) setting, the level of training of the ultrasound examiner and the availability of postnatal resources dictate the complexity of the ultrasound examination. As described in chapter 10, the basic six steps for the performance of the obstetric ultrasound examination can provide sufficient information to identify the high-risk pregnancy in low-resource settings.

TABLE 15.1	Biometric Measurements of the Basic Obstetric Ultrasound Examination

- Mean sac diameter (if no embryo is seen)
- Crown-Rump Length (up to 13 6/7 weeks gestation)
- Biparietal Diameter (after 13 6/7 weeks gestation)
- Head Circumference (after 13 6/7 weeks gestation)
- Abdominal Circumference (after 13 6/7 weeks gestation)
- Femur Length (after 13 6/7 weeks gestation)

A statement regarding the estimated date of delivery should be made and whether the final due date is changed based upon the ultrasound derived biometric criteria or the final due date will be unchanged and kept based upon the woman's last menstrual period. Furthermore, an estimated fetal weight should be derived and entered in the report for all obstetric examinations performed at or beyond 24-28 weeks of gestation.

Gynecology

The gynecologic ultrasound examination is intended to assess the pelvic organs including the uterus, both ovaries and the cul-de-sac. Biometric measurement of the uterus includes its length, height and width, and the endometrial thickness measured in a sagittal plane. Each ovary should

be measured in its length, height and width and the cul-de-sac should be evaluated for the presence of fluid or other abnormalities. The presence of any abnormality such as uterine fibroid or adnexal mass should be described in details in its anatomic location and ultrasound characteristic and measured in three dimensions. Chapter 14 describes a standardized approach to the performance of the gynecologic ultrasound examination.

Final Diagnosis and Follow-up

After describing the above findings for both the obstetric and the gynecologic report, a section summarizing the final diagnosis should be entered along with comments about the ultrasound findings. A follow-up plan should be provided as part of the ultrasound report. The presence of significant pathology such as major fetal malformation, an ectopic pregnancy or suspected ovarian cancer should be communicated to the referring healthcare provider immediately at the conclusion of the ultrasound examination.

References:

1) American Institute of Ultrasound in Medicine practice guidelines on the performance of the obstetric ultrasound examination, 2013.
2) http://www.aium.org/resources/guidelines/obstetric.pdf
3) Wax, J, Minkoff H, Johnson A, Coleman B, Levine D, Helfgott, A, O'Keeffe D, Henningsen, C and Benson C. Consensus Report on the Detailed Fetal Anatomic Ultrasound Examination: Indications, Components, and Qualifications. JUM, 2014:33; 189-195.
4) Salomon LJ, Alfirevic Z, Berghalla C, Bilardo C, Hernandez-Andrade E, Johnsen SL< Kalache K, Leung KY, Malinger G, Munoz H, Prefumo F, Toi A, Lee W. Practice guidelines for performance of the routine mid-trimester fetal ultrasound scan. Ultrasound Obstet Gynecol 2011:37; 116-126.
5) ISUOG Practice Guidelines: Performance of first-trimester fetal ultrasound scan. Ultrasound Obstet Gynecol 2013; 41: 102-113