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The Society for Maternal-Fetal Medicine (SMFM) Fetal Anomalies Consult Series



Society for Maternal-Fetal Medicine; Joanne E. Stone, MD, MSHCDL; Jeffrey A. Kuller, MD; Mary E. Norton, MD; Alfred Abuhamad, MD

he Society for Maternal-Fetal Medicine (SMFM) Fetal Anomalies Consult Series represents a collaborative effort to create an organ-based approach to the diagnosis, management, and treatment of fetal and placental anomalies. Each document in this series reviews a different fetal, placental, or maternal abnormality; the manuscripts will be organized by organ system or structure and published regularly in the American Journal of Obstetrics and Gynecology. The goal of this Consult Series is to provide readers with a systematic approach to the diagnosis, workup, and management of various abnormalities detectable by prenatal ultrasound imaging.

This project has its origins in work performed by the Beyond Ultrasound First initiative, which focused on standardization in obstetric and gynecologic ultrasound imaging to improve quality.1 From this forum emerged a plan for the creation of a new curriculum and competency assessment program for residents who perform obstetric and gynecologic ultrasound examinations. Subsequently, a consensus report based on work that was done by designated members of the American Institute of Ultrasound in Medicine (AIUM), SMFM, American College of Obstetricians and Gynecologists, American College of Osteopathic Obstetricians and Gynecologists, American College of Radiology, International Society of Ultrasound in Obstetrics and Gynecology, and Society of Radiologists in Ultrasound was developed, which standardized guidelines for the performance of obstetric and gynecologic ultrasound examinations and a competency assessment for resident education.² This document provided precise guidelines and recommendations for the performance of obstetric and gynecologic ultrasound examinations and procedures, which included fetal biometry, anatomic evaluation, the biophysical profile, and sonohysterography.

In 2017, Dr Alfred Abuhamad, then President of SMFM, recognized a similar need for an ultrasound curriculum for maternal-fetal medicine fellows that would standardize the images required for the evaluation of fetal anatomy and the diagnosis of specific fetal anomalies. Dr Abuhamad convened two joint task forces under the auspices of SMFM

and AIUM. One task force, led by Dr Karin Fuchs, created a curriculum of standardized images for normal fetal anatomy; the other task force, coordinated by Dr Joanne Stone, developed guidelines for standard images of fetal anomalies organized by organ system. The next logical step was to develop a series of reviews of fetal and placental anomalies that provide not only standardized ultrasound diagnostic recommendations but also clinical guidance on the differential diagnosis, approach to workup, genetic testing, and management. This series was created by SMFM members who volunteered a tremendous amount of time and effort to develop a Consult Series that we hope will ultimately benefit our members and other readers.

This series includes sections focused on abnormalities of the fetal abdominal wall, extremities, face, and thorax; gastrointestinal, genitourinary, cardiac, and central nervous systems; skeletal dysplasias; disorders of the umbilical cord, placenta and placental circulation, adnexa, and cervix; and those unique to monochorionic multiple gestations. Each anomaly follows a standard template that includes an introduction, definition, ultrasound findings, associated abnormalities, differential diagnoses, genetic evaluation, pregnancy and delivery management, prognosis, and a summary. A review of the genetic causes and evaluation has been provided by Mary E. Norton, MD; Jeffrey A. Kuller, MD; and Angie C. Jelin, MD. Each document in the series has also been reviewed by the SMFM Publications, Executive, and Document Review Committees.

We want to extend special thanks to the maternal-fetal medicine and radiology specialists who have worked on this Consult Series. We also thank AIUM for their collaborative efforts and assistance.

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