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Introduction

Ultrasound is the main diagnostic tool in the prenatal detection of congenital abnormalities. It allows examination of the external and internal anatomy of the fetus and the detection of not only major defects but also of subtle markers of chromosomal abnormalities and genetic syndromes. Although some women are at high risk of fetal abnormalities, either because of a family history or due to exposure to teratogens such as infection and various drugs, the vast majority of fetal abnormalities occur in the low-risk group. Consequently, ultrasound examination should be offered routinely to all pregnant women. The scan, which is usually performed at 18–23 weeks of pregnancy, should be carried out to a high standard and should include systematic examination of the fetus for the detection of both major and minor defects.

The Fetal Medicine Foundation, under the auspices of the International Society of Ultrasound in Obstetrics and Gynecology and the International Society of Perinatal Medicine, has introduced a process of training and certification to help establish high standards of scanning on an international basis. The Certificate of Competence in the 18–23-week scan is awarded to those sonographers that can perform the scan to a high standard and can demonstrate a good knowledge of a wide spectrum of fetal abnormalities.

This book, which summarizes the prevalence, etiology, prenatal sonographic features and prognosis for both common and rare fetal abnormalities, provides the basis of learning for the theoretical component of the Certificate of Competence in the 18–23-week scan.