

# Intrauterine growth restriction

## (January 2017)

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### Rationale

Intrauterine growth restriction is a pathological limitation of fetal growth. Intrauterine growth restriction (IUGR) is an important risk factor for pre- and post-natal morbidity and mortality. It is also a risk factor for atypical child development and adult health problems such as hypertension and diabetes. Infants with IUGR must be distinguished from infants who are constitutionally small for gestational age (SGA) but otherwise well.

### Causal Conditions

(list not exhaustive)

- Maternal (e.g., nutritional status)
- Fetal (e.g., genetic syndrome, intra-uterine infection)
- Placental (e.g., maternal smoking)

### Key Objectives

Given a pregnant patient with abnormal fetal growth, or a newborn with low birth weight, the candidate will diagnose the cause, severity, and complications, and will initiate an appropriate management plan. Particular attention should be paid to identification of modifiable risk factors for IUGR early in pregnancy, routine monitoring of fetal growth throughout pregnancy to identify the need for specialized obstetrical management, and careful evaluation of a neonate who is small for his gestational age to detect a possible case of IUGR and assess potential causal conditions.

### Enabling Objectives

Given a pregnant patient with abnormal fetal growth, or a newborn with low birth weight, the candidate will

- list and interpret critical clinical findings, including

- a. recognition of risk factors for IUGR;
  - b. routine monitoring of fetal growth through physical examination;
  - c. evaluation of a low birth weight infant to determine whether the case is one of IUGR or of a neonate who is constitutionally small for his gestational age, paying particular attention to features on history and physical examination that are indicators of potential causal conditions;
- list and interpret critical investigations, including
    - a. indications for pregnancy investigations to assess fetal growth and well-being (e.g., biophysical profile, Doppler);
    - b. indications for neonatal investigations for causal conditions of IUGR (e.g., karyotype);
  - construct an effective initial management plan, including
    - a. referral of the patient for specialized obstetrical investigation and management, if indicated;
    - b. initiation of resuscitation of a distressed neonate, as required;
    - c. referral for specialized pediatric care and developmental surveillance in the case of IUGR;
    - d. counselling and education of the patient regarding risk factors, management, and sequelae of IUGR, as appropriate.