



MEDICAL COUNCIL OF CANADA LE CONSEIL MÉDICAL DU CANADA

Updates to the MCC Objectives for the Qualifying Examinations

MAY 2020

REFERENCE TABLES

REVISED Objectives	NEW Reference
Hypothermia 107-5	Hypothermia and Cold-Related Injury 107-5
Immunization 74-2	Immunization 74-2
Prenatal Care 80-1	Prenatal Care 80-1

HYPOTHERMIA AND COLD-RELATED INJURY – 107-5

Rationale

Hypothermia is defined as a core temperature below 35°C, and it can represent a medical emergency. Severe hypothermia is defined as a core temperature below 28°C. Frostbite is a common and potentially serious injury.

Causal Conditions (list not exhaustive)

1. Decreased heat production (e.g., hypothyroidism)
2. Increased heat loss (e.g., exposure)
3. Impaired thermoregulation (e.g., neurologic, metabolic, alcoholic)

Key Objectives

Given a patient with hypothermia or a cold-related injury, the candidate will diagnose the cause, severity, and complications and will initiate an appropriate management plan. In particular, the candidate will recognize the severity of hypothermia and provide urgent therapy.

Enabling Objectives

Given a patient with hypothermia or a cold-related injury, the candidate will

1. List and interpret critical clinical findings, including
 - a. determining the severity by using appropriate methods;
 - b. determining whether concomitant illnesses or the use of alcohol or substances may have precipitated the condition;
2. List and interpret critical investigations, including
 - a. investigations for underlying causes (e.g., thyrotropin [thyroid-stimulating hormone]);
3. Construct an effective initial management plan, including
 - a. initiate life-saving treatment in case of severe hypothermia;
 - b. understanding the advantages and disadvantages of active and passive external rewarming and active core rewarming as well as appropriate rewarming of frostbitten areas;
 - c. conduct ongoing monitoring of patients during rewarming to identify complications (e.g., arrhythmia, infection);
 - d. determine if the patient requires further specialized care;
 - e. determine if the hypothermic patient is in cardiac arrest, recognizing the need for rewarming prior to ceasing resuscitation (particularly in the case of a child).

IMMUNIZATION – 74-2

Rationale

Immunization has the potential to either reduce or eradicate many infectious diseases, reduce the risk of complications from certain diseases, and improve overall health the world over. However, a rise in vaccine hesitancy has led to decreased immunization rates in developed countries.

Key Objectives

The candidate must be able to assess the immunization status of patients and recommend an appropriate schedule of vaccinations, discuss with patients and parents/guardians the risks and benefits of vaccination, and identify patients in need of vaccination who do not come in for routine visits (e.g., when presenting for assessment of a new illness).

Enabling Objectives

Identify patients needing vaccination, and for such patients the candidate will

1. List and interpret clinical findings, including
 - a. an immunization history as well as any contraindication to vaccination (e.g., anaphylaxis, immunosuppression);
2. Construct an effective initial management plan, including
 - a. obtaining informed consent;
 - b. giving patients/parents the information that they need to manage possible vaccine reactions;
 - c. outlining an appropriate vaccination schedule, including modifications to the usual schedule for special circumstances (e.g., catch-up schedules, immunocompromised patients);
 - d. advocating for vaccination based on currently accepted scientific data;
 - e. counselling patients/parents who refuse vaccinations;
 - f. reporting adverse immunization reactions, as required;
 - g. reaching out to population segments specifically at risk (e.g., elderly people, people with chronic illness, people who have received transplants, people with asplenia);
 - h. recognizing the importance of temperature regulation in the storage of vaccines to maintain efficacy.

PRENATAL CARE – 80-1

Rationale

Optimal prenatal care has the potential to reduce perinatal morbidity and mortality by identifying and reducing potential risks, treating medical conditions, providing psychosocial support, and promoting healthier lifestyles.

Key Objectives

Provide prenatal care that integrates the best available evidence into a model of shared decision-making that enables patients to make informed decisions based on their needs in all aspects of preconception, pregnancy, and fetal health.

Enabling Objectives

Given a patient who requires antepartum care, the candidate will

1. understand and apply the principles of informed decision-making and patient-centred care, including culturally sensitive issues;
2. provide care for preconception counseling (e.g., folic acid supplementation, weight management, smoking cessation);
3. establish the desirability of the pregnancy in a patient with suspected or confirmed pregnancy and construct an appropriate initial management plan;
4. provide initial and subsequent prenatal visits that include an appropriate history, physical examination, exploration of socioeconomic determinants of pregnancy outcome, counseling, and laboratory investigations;
5. identify risk factors and common prenatal complications (e.g., hypertension, maternal age, intrauterine growth restriction) and construct a plan for both the screening and initial management of these conditions.

The candidate will also

1. list and interpret relevant clinical findings, including
 - a. factors that contribute to the estimation of the date of confinement (e.g., last menstrual period, date of positive pregnancy test);
 - b. results of a thorough history that includes family, social, maternal health, and obstetrical histories;
 - c. results of systematic screening for tobacco, alcohol, and substance use or exposure;
 - d. need for referral for a therapeutic abortion and for counseling on the matter;
 - e. use of medications and supplements and the need for appropriate counseling;
 - f. need for timely counseling regarding prenatal genetic screening, including options, risks, benefits, and possible outcomes;

- g. risk factors and signs of prenatal and postpartum depression;
 - h. signs of intimate partner violence;
 - i. physiological changes characteristic of pregnancy and determination as to whether pregnancy is progressing satisfactorily (e.g., normal pregnancy symptoms) or if complications are present (e.g., hyperemesis, pain, bleeding);
 - j. in the second and third trimesters
 - i. fetal and maternal progress (e.g., weight gain, blood pressure, fetal heart rate, and movement);
 - ii. signs and symptoms of preterm labour;
 - k. determination of fetal lie and presentation in the third trimester;
 - l. signs and symptoms consistent with the onset of labour;
2. list and interpret relevant investigations, including
- a. appropriate initial diagnostic and screening tests (e.g., complete blood count, blood type, rubella status);
 - b. prenatal genetic screening options (e.g., serum integrated prenatal screen, nuchal translucency);
 - c. current recommendations for ultrasonography in a normal pregnancy;
 - d. indications and options for additional prenatal fetal surveillance (e.g., fetal movement counting, nonstress test, biophysical profile);
 - e. current recommendations regarding screening for prenatal complications and risk factors, including (list not exhaustive)
 - i. hemolytic disease of the newborn (e.g., from Rh isoimmunization);
 - ii. gestational diabetes;
 - iii. sexually transmitted infections;
 - iv. group B Streptococcus;
3. construct an effective initial management plan, including
- a. discussing the patient's adjustment to pregnancy (e.g., mood, work, stress, family);
 - b. counseling and referral to community resources for
 - i. prenatal and parenting classes;
 - ii. nutrition;
 - iii. substance use or substance use disorder;
 - iv. medication;
 - v. lifestyle (e.g., physical and sexual activity, travel);
 - vi. breastfeeding;
 - c. management of common prenatal presentations and complications (e.g., nausea and vomiting, bleeding, intrauterine growth restriction);

- d. discussing an appropriate follow-up plan for patients with a positive genetic screening result (e.g., amniocentesis, specialist referral);
- e. management of post-term pregnancy;
- f. referral for additional or specialized care (e.g., pre-eclampsia, psychiatric disorders, substance use disorder) if necessary