

APRIL 2022

VERSION 1.0

DEFINITION

Pediatric and Perinatal Pathology is the area of enhanced competence within Anatomical Pathology and General Pathology concerned with the diagnosis of diseases of the embryo, fetus, placenta, and neonate (perinatal pathology) and of infants, children, and adolescents (pediatric pathology). Pediatric and Perinatal Pathology encompasses examination of cytology, biopsy, and surgical specimens, as well as of the placenta and products of conception and autopsy of embryos, fetuses, infants, children, and adolescents.

GOALS

Upon completion of training, a diplomate is expected to function as a competent specialist in Pediatric and Perinatal Pathology, capable of an enhanced practice in this area of focused competence (AFC) within the scope of Anatomical Pathology (AP) or General Pathology (GP). The AFC trainee must acquire a working knowledge of the theoretical basis of the discipline, including its foundations in science and research, as it applies to medical/surgical practice.

The discipline of Pediatric and Perinatal Pathology includes responsibility for the following:

1. Performance and reporting of perinatal and pediatric autopsies
2. Performance and reporting of intraoperative consultations
3. Performance and reporting of surgical pathology¹ examinations
4. Performance and reporting of placental examinations
5. Collaboration in multidisciplinary pediatric and perinatal care
6. Advancement of the discipline of Pediatric and Perinatal Pathology through scholarship

¹ Surgical pathology refers to examination of cytology, biopsy, and surgical specimens.

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NOTES:

All markers must be signed off by supervisor prior to being added to the portfolio.

All cases or clinical material added to the portfolio must be de-identified to preserve patient privacy. This requires the removal of key identifiers, including name, birth date, and date of consultation.

All reports added to the portfolio must include an attestation from the reporting physician that the report was not altered from the AFC trainee's interpretation.

Throughout this document, references to an entrustable level of performance refer to an assessment by the supervisor that the AFC trainee would be able to perform that task without supervision (i.e., supervisor "did not have to be there"). That judgment is based on a global or holistic assessment of performance of the overall task, rather than discrete assessment of the individual elements of the task. The AFC program has the discretion to use any one of a variety of methods to document this assessment; examples include statements from the faculty member attesting to AFC trainee performance, qualitative comments that describe the AFC trainee's performance, and rating scales that use entrustment anchors (e.g., O-SCORE²).

Diplomates must demonstrate the requisite knowledge, skills, and behaviours for effective patient-centred care and service to a diverse population. In all aspects of specialist practice, the diplomate must be able to address ethical issues and issues of gender, sexual orientation, age, culture, beliefs, and ethnicity in a professional manner.

At the completion of training, the AFC trainee must demonstrate evidence of acquisition of the competencies listed on the following pages.

In the view of the AFC Program Committee, this candidate has acquired the competencies of the diploma program as prescribed in the *Competency Portfolio* and is competent to practise as a diplomate. **YES** **NO**

² Gofton, WT, Dudek, NL, Wood, TJ, Balaa, F, Hamstra, SJ. The Ottawa Surgical Competency Operating Room Evaluation (O-SCORE): A Tool to Assess Surgical Competence. Acad Med. 2012;87:1401-1407.

Major Task 1

Performance and reporting of perinatal and pediatric autopsies

Sub-tasks

- 1.1 Prepare for autopsy
- 1.2 Perform autopsy
- 1.3 Interpret, integrate, and report autopsy findings

1.1 Prepare for autopsy

This includes

- reviewing validity and limitations of consent for autopsy
- selecting and preparing the setup for the autopsy procedure
- summarizing information from clinical records (maternal, child) and results of prior investigations, such as clinical, imaging, and laboratory findings

Evidence of achievement

- 1.1 5 observation forms

The case mix must include at least

- 1 perinatal case
- 1 pediatric case

1.2 Perform autopsy

This includes

- performing a comprehensive external examination
- performing the internal examination with dissection of internal organs
- performing removal of brain and spinal cord, when required
- documenting findings with photographs, as appropriate
- consulting with clinical and pathology colleagues, when required
- obtaining appropriate tissue and/or fluid samples for histology, ancillary studies, and other studies

Evidence of achievement

- 1.2 5 observation forms

The case mix must include a variety of clinical conditions, and

- at least 1 perinatal case
- at least 1 pediatric case
- at least 1 fragmented fetus
- at least 1 case of a malformation
- at least 1 case of suspected genetic syndrome or metabolic disorder

The cases of malformation may be the same as those of suspected genetic syndrome or metabolic disorder.

1.3 Interpret, integrate, and report autopsy findings

This includes

- performing the microscopic examination
- selecting, ordering, interpreting, and integrating the results of ancillary studies
- reviewing and integrating clinical, imaging, and laboratory findings
- consulting with colleagues, when required
- preparing the autopsy report

Evidence of achievement

1.3a 5 of any of the following:

- autopsy report
- observation form

The case mix must include a variety of clinical conditions, and

- at least 1 perinatal case
- at least 1 pediatric case
- at least 1 case of a malformation
- at least 1 case of a suspected genetic syndrome or metabolic disorder

and

1.3b Logbook of autopsies

The logbook must collect information on

- type of autopsy (limited or full)
- age or gestational age
- main diagnosis

The logbook must demonstrate a spectrum of age, diagnoses, and type of autopsy.

Major Task 2

Performance and reporting of intraoperative consultations

Sub-tasks

- 2.1 Prepare for intraoperative consultation
- 2.2 Perform the intraoperative consultation

2.1 Prepare for intraoperative consultation

This includes

- reviewing the daily list of surgical procedures and identifying cases that may require intraoperative consultation
- summarizing patient history, including prior clinical, imaging and laboratory findings as applicable

Evidence of achievement

- 2.1 5 observation forms

2.2 Perform the intraoperative consultation

This includes

- verifying the purpose and clinical indications for intraoperative consultation
- performing the macroscopic examination
- selecting tissue for intraoperative microscopic examination
- selecting and handling tissue samples for ancillary studies
- interpreting macroscopic and microscopic findings, integrating clinical, imaging, and pathological features, and providing a diagnosis
- communicating findings to the surgical team in a timely fashion
- documenting the intraoperative consultation
- handling and orienting tissue for routine pathological assessment

Evidence of achievement

- 2.2a 5 observation forms

The case mix must include a variety of clinical conditions, and

- at least 3 cases of fresh tissue for triaging
- at least 1 case of Hirschsprung disease

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and

2.2b Logbook of intraoperative consultations

The logbook must collect information on

- organ or tissue type
- diagnosis

The logbook must demonstrate a wide spectrum of perinatal and pediatric conditions and different organs and tissues.

Major Task 3

Performance and reporting of surgical pathology examinations

Sub-tasks

3.1 Perform macroscopic examination

3.2 Perform microscopic examination and prepare the pathology report

3.1 Perform macroscopic examination

This includes

- matching the requisition, container, and specimen
- reviewing the clinical history and imaging findings
- documenting macroscopic findings and completing standard macroscopic dissection protocols, using photographs when required
- sampling tissue for microscopic examination
- triaging and submitting tissue for ancillary studies

Evidence of achievement

3.1 5 of any of the following:

- observation form
- report of macroscopic dissection

The case mix must include a variety of anatomic sites, and

- at least 3 non-osseous tumour resections
- at least 1 bone tumour resection with mapping

3.2 Perform microscopic examination and prepare the pathology report

This includes

- interpreting microscopic findings in the clinical context
- selecting, interpreting, and integrating the results of ancillary studies
- obtaining a second review or consultation, when required
- providing a diagnosis and discussion of differential diagnoses as appropriate
- identifying and communicating critical or significant unexpected findings in a timely manner
- documenting relevant communications and consultations
- preparing the report

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Evidence of achievement

3.2a 25 of any of the following:

- observation form
- pathology report

The case mix must include a variety of anatomic sites, and

- at least 10 tumour biopsies
- at least 5 tumour resections
- at least 10 biopsies for non-neoplastic conditions

and

3.2b Logbook of surgical pathology

The logbook must collect information on

- organ or tissue type
- type of procedure (i.e., biopsy or resection)
- diagnosis

The logbook must demonstrate a wide spectrum of perinatal and pediatric conditions and different organs and tissues.

Major Task 4

Performance and reporting of placental examinations

Sub-tasks

4.1 Perform macroscopic examination

4.2 Perform microscopic examination and prepare the pathology report

4.1 Perform macroscopic examination

This includes

- reviewing indications and triaging placentas for macroscopic examination
- performing macroscopic examination, and supervising macroscopic examination by pathology assistants and technologists
- reviewing the macroscopic examination
- assessing vascular anastomoses for multiple gestations
- documenting findings and completing standard macroscopic dissection protocols, obtaining photographs when required.
- sampling tissue for microscopic examination and ancillary studies, when required

Evidence of achievement

4.1 10 of any of the following:

- observation form
- report of macroscopic examination

The case mix must include

- 5 placentas from a singleton pregnancy
- 5 placentas from a multiple gestation pregnancy

4.2 Perform microscopic examination and prepare the pathology report

This includes

- interpreting microscopic findings in the clinical context
- selecting, interpreting, and integrating the results of ancillary studies
- preparing the pathology report, including using normative data and recommended terminology
- providing recommendations for further investigation of mother and/or neonate when needed
- indicating risks for future pregnancy when relevant

Evidence of achievement

4.2a 15 of any of the following:

- observation form
- pathology report

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The case mix must include a variety of placental pathologies, and

- at least 5 placentas from a multiple gestation pregnancy

and

4.2b Logbook of placental examinations

The logbook must collect information on

- type of placenta (i.e., singleton or multiple)
- diagnosis

The logbook must demonstrate a wide spectrum of types of placenta and placental pathologies.

Major Task 5

Collaboration in multidisciplinary pediatric and perinatal care

Sub-task

5.1 Participate in multidisciplinary rounds and clinical discussions for the integrated care of patients with pediatric and perinatal conditions

This includes

- reviewing, summarizing, and presenting relevant pathology findings
- discussing pathology findings within the clinical context
- communicating effectively
- facilitating shared decision making
- advocating for patients and families
- contributing expertise to the discussion and decision-making

Evidence of achievement

5.1 1 of the following, for each type (see below) of rounds:

- collated results of multisource feedback
- or*
- direct observation by supervisor

For multisource feedback the submission must include contributions from at least 4 respondents. Respondents must include health care professionals from at least 2 different disciplines.

The evidence of achievement must include at least 3 different types of multidisciplinary rounds, including autopsy, placenta, and surgical pathology rounds of neoplastic (e.g., tumour boards) and non-neoplastic conditions.

Major Task 6

Advancement of the discipline of Pediatric and Perinatal Pathology through scholarship

Sub-tasks

- 6.1 Teach Pediatric and Perinatal Pathology-related topics to a variety of audiences
- 6.2 Participate in scholarly work related to Pediatric and Perinatal Pathology

6.1 Teach Pediatric and Perinatal Pathology-related topics to a variety of audiences

This includes

- reviewing and synthesizing the literature
- presenting effectively

Evidence of achievement

- 6.1 Evaluation of teaching activities
 - collated participant evaluations

or

 - supervisor evaluation

The evidence of achievement must be collected from at least 2 teaching activities for different audiences.

6.2 Participate in scholarly work related to Pediatric and Perinatal Pathology

This includes a scholarly approach to education, research, or quality improvement.

Evidence of achievement

- 6.2 1 of any of the following:
 - abstract submitted to a national or international conference
 - completed manuscript
 - research proposal or grant application
 - learning module or curriculum, or other educational project
 - report of quality improvement project

This document is to be reviewed by the AFC Subcommittee in Pediatric and Perinatal Pathology by February 1, 2024

Drafted – AFC Working Group in Pediatric and Perinatal Pathology; Office of Specialty Education – November 2021

Approved – Specialty Standards Review Committee – December 2021