OBJECTIVES

- To provide health care professionals with direction to provide safe and consistent care to patients who display signs and symptoms of a generalized tonic-clonic seizure while accessing the Injectable Opioid Agonist Therapy (iOAT) program.

APPLICABILITY

Compliance with this document is required by all Alberta Health Services employees, members of the medical and midwifery staffs, Students, Volunteers, and other persons acting on behalf of Alberta Health Services (including contracted service providers as necessary).

ELEMENTS

1. **Points of Emphasis**

   1.1 Health care professionals shall assess the patient for previous history of seizure activity and related factors.

   1.2 Seizures can be a common side effect of high doses of hydromorphone.

   1.3 An **authorized prescriber’s order** is required to initiate this protocol before or at the same time of the incident. An order to authorize initiation of this protocol, when required, shall be documented by the authorized prescriber in the **health record** at time of admission to the program or prior to initiating administration of the opioid treatment in this program.
2. Assessment

2.1 A seizure may present with any of the following signs and symptoms:

a) unconsciousness;

b) convulsions;

c) muscle rigidity; and/or

d) may or may not experience bowel and/or bladder incontinence.

3. Generalized Tonic-Clonic Seizure Management

3.1 If a seizure is suspected the health care professional shall enact this protocol, hold all doses of hydromorphone, and notify the Physician or Nurse Practitioner on site or the most responsible health practitioner (MRHP) on call for direction as soon as possible regarding next steps including:

a) whether to treat on site based on response or past medical history; and/or

b) calling 911 immediately to activate Emergency Medical Services (EMS) to initiate transfer to an Emergency Department. See more detailed information under Section 4.1 Management with Medications.

3.2 If the patient is actively having a generalized tonic-clonic seizure:

a) protect the patient from harm;

b) ensure the surrounding area is safe;

c) loosen the patient’s tight clothing as appropriate; and

d) do not attempt to insert anything into the patient’s mouth.

3.3 Once seizure activity stops, unless contraindicated, place the patient on their left side.

3.4 When seizure activity stops a focused patient assessment shall be completed by the health care professional, including neurological vital signs.

3.5 If the patient is unconscious and not actively having a tonic-clonic seizure ensure that the patient has a patent airway.

a) Consider, based on clinical assessment, the use of the following adjuncts:

(i) jaw thrust;

(ii) an oral pharyngeal airway (OPA); or
(iii) if the patient has trismus (clenched teeth) a nasal pharyngeal airway (NPA).

3.6 Gather suction equipment and suction airway as needed to maintain patency.

3.7 Administer oxygen up to five (5) litres per minute (L/min) via nasal prongs, or six to ten (6-10) litres per minute via mask to maintain oxygen saturation percent between 94 and 98 percent (%).

4. **Management with Medications**

4.1 If the patient is actively having generalized tonic-clonic seizures for longer than five (5) minutes, or experiences two (2) or more generalized tonic-clonic seizures without regaining consciousness between them then:

   a) for patients 18 years of age or older, give midazolam ten (10) milligrams (mg) by intramuscular (IM) injection, once (do not repeat IM dose);

   (i) for patients under the age of 18 years a patient specific order for medication management is required from the Physician, Nurse Practitioner on site, or the MRHP on call;

   b) the patient may require transport to an Acute Care site for further assessment or interventions based on response to medications and/or consultation with the Physician, Nurse Practitioner on site or the MRHP on call;

   c) monitor the patient closely for potential overdose response due to the administration of midazolam in combination with hydromorphone, as overdose may occur;

   d) maintain safety of the patient and continue supportive treatment if EMS is called and until they arrive.

5. **Post Seizure Monitoring On-Site**

5.1 After consultation with the Physician or Nurse Practitioner on-site or the MRHP on-call, the patient may be monitored on-site if they meet the following recovery criteria:

   a) the seizure stopped spontaneously within five (5) minutes of onset;

   b) the patient has a brief (less than 30 minutes) postictal period;

   c) the patient is awake, alert, and has returned to their pre-seizure level of consciousness;

   d) the patient has no evidence of trauma;
5.2 If the Glasgow Coma Scale (GCS) score decreases within the 30 minute postictal period, call EMS upon direction from the Physician, Nurse Practitioner on site or the MRHP on call, and maintain safety and supportive treatment until they arrive.

5.3 Monitoring Expectations:

a) Monitor vital signs (neuro vital signs, pulse, blood pressure and respirations) every 15 minutes two (2) times, and if vital signs indicate instability contact the Nurse Practitioner or Physician on site or the MRHP on call for further orders.

b) If vital signs are stable then repeat an additional two (2) times every 15 minutes, and if vital signs are stable then the patient can be discharged home to return for next appointment following consultation with the Physician or Nurse Practitioner on site or the MRHP on call.

5.4 Communication with EMS providers at time of transfer.

6. Post Seizure Follow-up

6.1 The health care professional shall contact the Nurse Practitioner or Physician on site or the MRHP on call to discuss further orders as indicated in Section 3.1 including dosing adjustments for the next clinic visit or other measures for follow-up.

6.2 If the patient is alert and able, the health care professional shall offer education related to seizures, including what occurred and plans for next steps.

6.3 The Care Manager or delegate should arrange for a staff debriefing session following any adverse event. This session should provide all staff and Physicians the opportunity to discuss the steps taken, address any issues and identify areas for improvement and support for the future. The process for debriefing for the specific incident shall be at the discretion of the Care Manager or delegate based on assessment of the circumstances at the time.

7. Documentation

7.1 Health care providers shall document in the patient’s health record all interventions performed including:

a) observations and findings;

b) clinical treatment;

c) emergency procedures undertaken;
d) patient responses to treatment;
e) transfer information; and
f) follow-up.

**DEFINITIONS**

**Authorized prescriber** means a health care professional who is permitted by Federal and Provincial legislation, their regulatory college, Alberta Health Services, and practice setting (where applicable) to prescribe medication.

**Health care professional** means an individual who is a member of a regulated health discipline, as defined by the *Health Disciplines Act* or the *Health Professions Act*, and who practices within scope or role.

**Health care provider** means any person who provides goods or services to a patient, inclusive of health care professionals, staff, students, volunteers and other persons acting on behalf of or in conjunction with AHS.

**Health record** means the Alberta Health Services’ legal record of the patient’s diagnostic, treatment and care information.

**Injectable opioid agonist therapy (iOAT)** means the provision of supervised injectable hydromorphone as a treatment option for patients with severe opioid use disorder (OUD) that have been previously unsuccessful with current opioid agonist therapy options including oral medications (e.g., Methadone, Suboxone).

**Most responsible health practitioner** means the health practitioner who has responsibility and accountability for the specific treatment/procedure(s) provided to a patient and who is authorized by Alberta Health Services to perform the duties required to fulfill the delivery of such a treatment/procedure(s) within the scope of their practice.

**Order** means a direction given by a regulated health care professional to carry out specific activity (-ies) as part of the diagnostic and/or therapeutic care and treatment, to the benefit of a patient. An order may be written (including handwritten and or electronic), verbal, by telephone or facsimile.

**Patient(s)** means all persons who receive or have requested health care or services from Alberta Health Services and its health care providers. This term is inclusive of residents and clients.

**REFERENCES**

N/A

**VERSION HISTORY**

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