NZ COLLEGE OF SEXUAL & REPRODUCTIVE HEALTH

MODULE 3

Emergency plans

Anaphylaxis

Anaphylaxis – Wall Chart

Administration of intravenous naloxone

Management of cervical shock during early surgical abortion

Uterine perforation occurring at the time of early surgical abortion

Vaginal haemorrhage in early surgical abortion

Vaginal haemorrhage flowchart

Anaphylaxis

Recognise the symptoms and treat early:

- Tachycardia
- Immediate pain at injection site
- Rash on face, chest or neck
- Generalised sensation of prickling
- Immediate loss of consciousness

NOT to be confused with fainting which has:

- Bradycardia
- None of the other symptoms above

Action

Take all steps as soon as anaphylaxis suspected

Call for help, dial 111

Adrenaline 0.5 mg injection intramuscular (IM) into thigh
(0.5 mL of an ampule of 1:1000 adrenaline)

Repeat adrenaline at 5-minute intervals if needed (maximum three injections)

Give oral loratadine 10 mg

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Symptoms

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Administration of intravenous naloxone

Purpose

This protocol is to be followed for the safe and effective administration of intravenous (IV) naloxone when it is required to reverse opioid-induced sedation (and/or ventilatory impairment).

Scope

All registered nurses, midwives and medical staff.

Definitions

Naloxone – An opioid receptor antagonist, most commonly used to treat "opioid overdose".

Opioid-induced ventilatory impairment (OIVI) – OIVI is a more complete term than the commonly used respiratory depression encompassing opioid-induced central respiratory depression (decreased respiratory drive), decreased level of consciousness (sedation) and upper airway obstruction.

Indications

- OIVI

Contra-indications

- Hypersensitivity to naloxone

Precautions

- Opioid dependency and/or tolerance
- Non-opioid respiratory depression
- Pregnancy and lactation
- Cardiovascular disease

Adverse effects

- Abrupt reversal of analgesia and return of pain
- Hypertension
- Agitation, tremors/seizures, sweating
- Abdominal cramps, nausea

Initiation of this protocol is indicated for patients aged ≥ 12 years

Assess the need for naloxone as demonstrated by the following opioid-induced effects:

- Excessive sedation (the patient is unresponsive to voice, pain or other stimulation)
- Hypoventilation (respiratory rate less than 8 per minute)
- Irregular and slow breathing pattern, apnoea episodes and/or partial obstruction of the upper airway and associated over-sedation

Follow the Early Warning Score (EWS) escalation pathway as indicated by the patient's clinical status. If the patient meets criteria (e.g. unresponsive to pain or respiratory rate less than 8 per minute) initiate the appropriate procedure.

STOP any further opioid administration pending review by the operating health practitioner.

Naloxone should be drawn up ready for administration when a verbal order has been given.

Naloxone preparation and administration

Naloxone is prepared and administered as follows:

Dosage

- Naloxone 400 micrograms diluted to a total volume of 10 mL with sodium chloride 0.9%. Concentration of naloxone is 40 micrograms/mL.

Administration

- Draw up the naloxone first then add diluent:
  - Administer 1 mL (40 micrograms)
  - Wait 60 seconds
  - If there is no response, administer a further 1 mL (40 micrograms)
  - Wait 60 seconds
- Repeat administration up to a total of 4 mL (160 micrograms), 1 mL at a time as described, waiting 60 seconds between repeat doses.

Naloxone will begin to reverse sedation within 1 to 2 minutes. The patient should then be able to open their eyes and talk. The amount of naloxone required to reverse OIVI will vary among patients. Administration of naloxone according to the titration-to-effect technique allows reversal of adverse effects while minimising analgesia reversal.

If no immediate response to naloxone then commence the appropriate procedures if this has not already been done.

RING 111 – INITIATE ABC

Monitoring

Continue to monitor the patient until acceptable parameters are met:

- Level of consciousness (sedation score)
- Respiratory status — respiratory rate, airway tone and respiratory pattern
- Blood pressure and heart rate
- Pain score every 5 minutes

The duration of clinical effect of naloxone is shorter than most opioid agonists, therefore, it is important to continue monitoring closely for increasing sedation and decreasing respiratory function until stable. Further doses of naloxone may be required.

On-going analgesia

Administer non-opioid analgesia, regular paracetamol and non-steroidal anti-inflammatory drugs (NSAIDs) if appropriate and recommence opioid analgesia according to the patient's clinical condition and medical advice.

Management of cervical shock during early surgical abortion

Purpose
This advice provides guidance for health practitioners on the management of cervical shock during early surgical abortion

Definition

- Drop in blood pressure > 20 mmHg systolic below initial observations; and
- Drop in heart rate > 20 bpm below initial observations; and
- Symptoms and signs consistent with shock, e.g. syncope/near syncope, nausea, pallor

Management

Responsibility	Action
Operating health practitioner	• Remove any instruments/products leading to cervical dilatation • Request IV injection of atropine 0.6 mg • Request raise of foot of bed • Reconfirm diagnosis • If shock remains 60 seconds later repeat atropine 0.6 mg IV. Repeat up to a total of 3 mg (5 × 0.6 mg) over 5 minutes • If shock remains reconfirm diagnosis and consider adrenaline 0.5 mg IM • If abortion procedure is incomplete arrange transfer of patient to hospital once condition stabilised
Health practitioner managing sedation/ airway	• Administer IV Atropine at operating health practitioner's request • Commence 5-minute routine of vital sign observation (blood pressure, heart rate and O_2 saturation) • Assist operating health practitioner in other aspects of resuscitation
Health practitioner assisting abortion provider	• Present for collection and delivery of medicines/instruments if transfer to hospital is required • Call ambulance • Call on-call gynaecologist and relay history if operating health practitioner is unable to talk to the specialist • Inform relatives/support people of need to transfer to hospital
Post-event	• At the end of the event, a break in the surgical list should be taken for all staff members to debrief and confirm preparedness to restart the list
Shared information	• Support people are informed regarding the events and treatment plan • All documentation is completed

Uterine perforation occurring at the time of early surgical abortion

Purpose
This advice provides guidance on treatment if there is any suspicion of uterine perforation indicated by the operating health practitioner. Note for acute haemorrhage from suspected uterine perforation, see "Vaginal haemorrhage in early surgical abortion".

Management

Responsibility	Action
Operating health practitioner	1. Immediately ceases procedure and remove any uterine instrumentation 2. Inspects for blood loss vaginally (if heavy loss present follow vaginal haemorrhage protocol) 3. Assesses haemodynamic stability of the patient, manage via resuscitation if any signs of shock 4. Examine and assess for signs of intra-abdominal bleeding 5. Assist in arrangement for patient transfer
Health practitioner managing sedation/ airway	1. Commence 5-minute routine of vital sign observation (blood pressure, heart rate and O_2 saturation) 2. Set up intravenous infusion of 0.9% saline 3. Assist operating health practitioner in other aspects of resuscitation as required
Health practitioner assisting abortion provider	1. Be present for collection and delivery of medicines/instruments 2. Call ambulance (at operating health practitioner request) 3. Contact on-call gynaecologist and relay history if operating health practitioner is unable to talk to specialist 4. Inform relatives/support people of the need to transfer to hospital
Post-event	At the end of the event, a break in the surgical list should be taken for all staff members to debrief and confirm preparedness to restart the list

Vaginal haemorrhage in early surgical abortion

Follow this procedure to manage a vaginal haemorrhage resulting from early surgical abortion.

Definition of haemorrhage

1. > 200 mL blood in MVA/EVA suction collection receiver
2. Brisk bleeding noted by surgeon during procedure
3. Immediate post-operative loss involving more than two pads soaked in 30 minutes

Management

Responsibility	Action
Operating health practitioner	• Inspect the genital tract to define/identify source of bleeding • Immediate management of non-uterine blood loss by surgical haemostasis • In the case of uterine loss, steps taken until haemorrhage abated or transfer occurs Immediate actions include but are not limited to the following: 1. Request oxytocin (either 10 units IM, or 10 – 40 units IV in crystalloid, or 10 units IVP) to be given by health practitioner managing sedation/airway 2. Bimanual compression of the uterus 3. Misoprostol 600 micrograms given PR 4. Tranexamic acid 1 g IV 5. Foley catheter entered into uterus with balloon inflated to 30 mL 6. Assist in stabilisation of patient prior to transfer
Health practitioner managing sedation/ airway	**Health Practitioner managing sedation/airway must remain with patient at all times** 1. Deliver oxytocin as directed by operating health practitioner 2. Perform vital observations at 5-minute intervals – this includes blood pressure, heart rate, O_2 saturation 3. Set up intravenous infusion of 0.9% saline 1000 mL stat
Health practitioner assisting abortion provider	1. Be present for collection and delivery of medicines/instruments 2. Arrange for ambulance transfer to emergency department/theatre 3. Contact on-call gynaecologist and advise of history 4. Inform relatives/support people of the need to transfer to hospital
Post-event	At the end of the event a break in the list surgical should be taken for all staff members to debrief and confirm preparedness to restart the list

Vaginal haemorrhage flowchart