SOGC Statement on Potential Misoprostol Shortage

Original date: May 4, 2023

The SOGC has been informed by Health Canada that supplies of Misoprostol are at risk due to a shortage of raw materials. Stocks of this medication might be unequal from one region to another across the country. The SOGC recommends conserving current stocks of Misoprostol for their usual indications and emergencies; alternatives are provided below for both gynaecology and obstetrics. We are aware that some distributors have stockpiled Misoprostol, and therefore the supply should be stable in May and June.

Before you implement new protocols, we recommend that you *confirm with your supplier* if there is a possibility to obtain Misoprostol from other hospitals in your region.

We will keep you informed as we learn more about the timing and probability of a shortage across provinces and territories and suggest when implementation of more restrictive protocols may be necessary.

Alternatives to Misoprostol in Gynæcology

Cervical Preparation Prior to Uterine Instrumentation

Use of smaller diameter hysteroscopes can reduce the need for additional cervical dilatation and risk of false passage or perforation. Endometrial biopsy can be done to obtain endometrial tissue without dilation. Mechanical or osmotic dilators are alternatives to Misoprostol.

Evacuation of Products of Conception from the Uterus

Alternatives to medical evacuation may be surgical (suction evacuation or targeted hysteroscopic removal) or expectant management in selected cases. Please note that, while there is not an anticipated shortage of Mifegymiso, the cost will be higher, and the use is currently restricted to medical abortion in most provinces.

Prevention of Blood loss at Gynæcological Surgery

Alternatives include tranexamic acid, injection of vasopressin, use of uterine tourniquet, application of hemostatic agents, and ligation of the uterine arteries. Patients should be optimized in terms of pre-operative hemoglobin.

SOGC Guideline No. 318: The Management of Uterine Leiomyomas

Alternatives to Misoprostol in Obstetrics

Cervical Ripening and Induction of Labour

Where indicated, Misoprostol is a safe and effective option to achieve cervical ripening and induction of labour. Health care providers should consider balloon catheters first-line agents for cervical ripening whenever feasible, as they are safe and effective, including in an outpatient setting and in a trial of labour after cesarean. With a favourable cervix (modified Bishop score 7 or greater), oxytocin (low-rate infusion) with amniotomy may be used as an acceptable alternative to Misoprostol for induction of labour.

SOGC Guideline No. 432b: Cervical Ripening

SOGC Guideline No. 432c: Induction of Labour

Second or Third Trimester Pregnancy Loss or Termination of Pregnancy

Misoprostol is frequently used for medical induction of labour associated with pregnancy loss or termination.

In the second trimester, an acceptable alternative is to offer dilatation and evacuation by surgical means by trained and skilled providers. In preparation, cervical ripening/dilation can be safely achieved with osmotic dilators. Oxytocin fails to induce labour as effectively as Misoprostol in the second trimester as there are relatively fewer oxytocin receptors. Therefore, in individuals that decline or are not suitable for surgical management, Misoprostol may be the only option; we recommend that Misoprostol be prioritized for use in these circumstances in the event of a shortage.

In the third trimester, induction of labour practices may be followed as described in the above section.

Postpartum Hemorrhage

During postpartum hemorrhage, Misoprostol is an effective adjunct to oxytocin to treat uterine atony. There is an array of alternative treatments, including carbetocin, additional oxytocin, ergotamine (ergometrine), PGF2α (carboprost), balloon tamponade-Bakri or other. Tranexamic acid is also a useful adjunct as an antifibrinolytic. Surgical treatments for postpartum hemorrhage include uterine compression sutures, pelvic artery ligation and hysterectomy. Where available, pelvic artery embolization may also be considered in stable patients. That said, consideration should be given to conserve supply for life-saving situations like postpartum hemorrhage.

SOGC Guideline No. 431: Postpartum Hemorrhage and Hemorrhagic Shock

Acknowledgements

We thank Dr Paul Yong, Dr David Rittenberg and Dr Sebastian Hobson for their contributions to this statement.