Hemorrhoids in pregnancy

Arthur Staroselsky MD  Alejandro A. Nava-Ocampo MD  Sabina Vohra  Gideon Koren MD FRCP

Pregnancy and vaginal delivery predisposes women to develop hemorrhoids because of hormonal changes and increased intra-abdominal pressure. It has been estimated that 25% to 35% of pregnant women are affected by this condition.1,2 In certain populations, up to 85% of pregnancies are affected by hemorrhoids in the third trimester.3

Hemorrhoids occur when the external hemorrhoidal veins become varicose (enlarged and swollen), which causes itching, burning, painful swellings at the anus, dyschezia (painful bowel movements), and bleeding. Pain with bowel movements and bleeding are often the first signs of hemorrhoids. It is important to note, however, that hemorrhoids are not the only cause of rectal bleeding, and the physician should properly confirm the diagnosis before initiating any treatment. Hemorrhoids should be treated to prevent more serious complications, including inflammation, thrombosis, and prolapse.

Treatment

Most forms of the condition can be successfully treated by increasing fibre content in the diet, administering stool softeners, increasing liquid intake, anti-hemorrhoidal analgesics, and training in toilet habits. However, most evidence of the efficacy of therapeutic alternatives for hemorrhoids is gained from studies performed in non-pregnant patients.

A recent systematic review of both published and unpublished randomized controlled trials, which included the enrolment of more than 350 patients, showed that laxatives in the form of fibre had a beneficial effect in the treatment of symptomatic hemorrhoids.4 Decreased straining during bowel movements shrinks internal hemorrhoidal veins, resulting in a reduction of symptoms. Bathing with warm water (40°C to 50°C for 10 min) usually relieves anorectal pain.5 Suppositories and ointments that contain local anesthetics, mild astringents, or steroids are available (see Topical treatment).

More aggressive therapies, such as sclerotherapy, cryotherapy, or surgery, are reserved for patients who have persistent symptoms after 1 month of conservative therapy.6 Some recent studies have shown the effectiveness of botulinum toxin injections as a treatment for chronic anal fissure and hemorrhoids.7-9 Because of its mechanism of action, however, botulinum toxin is contraindicated during pregnancy and lactation.

Although most pregnant women experience improvement or complete resolution of their symptoms with
the conservative measures mentioned above, some women will need medications. Oral treatment with rutosides, hidrosmine, *Centella asiatica*, disodium flavodate, French maritime pine bark extract, or grape seed extract can decrease capillary fragility and reduce symptoms improving the microcirculation in venous insufficiency. However, evidence of their safety in pregnancy is not yet conclusive.

### Topical treatment
Topical medications with analgesics and anti-inflammatory effects provide short-term local relief from discomfort, pain, and bleeding. Because of the small doses and limited systemic absorption, they can be used by pregnant women; however, the safety of any of them in pregnancy has not been properly documented.

Most topical preparations for hemorrhoids have been used in Canada for more than 25 years. They often contain anesthetics, corticosteroids, and anti-inflammatory agents in varying proportions. Most of these products help to maintain personal hygiene and alleviate symptoms. However, there are no prospective randomized trials that suggest topical preparations reduce bleeding or prolapse in nonpregnant patients.

### Conclusion
At present, there are no reproductive safety data available for any of the compounds commonly used for hemorrhoids. Hemorrhoids in pregnancy should be treated by increasing fibre content in the diet, administering stool softeners, increasing liquid intake, and training in toilet habits. It is expected that these conservative measures can alleviate symptoms in most patients. If required, patients should receive topical treatment. For many women, most symptoms will resolve spontaneously soon after giving birth, and only few cases will require a surgical evaluation during pregnancy or after delivery.

### References

Motherisk questions are prepared by the Motherisk Team at the Hospital for Sick Children in Toronto, Ont. Dr Staroselsky and Dr Nava–Ocampo were fellows and Dr Koren is Director of the Motherisk Program. Ms Vohra is a graduate student at the University of Toronto. Dr Koren is supported by the Research Leadership for Better Pharmacotherapy during Pregnancy and Lactation and, in part, by a grant from the Canadian Institutes of Health Research. He holds the Ivey Chair in Molecular Toxicology at the University of Western Ontario in London.

Do you have questions about the effects of drugs, chemicals, radiation, or infections in women who are pregnant or breastfeeding? We invite you to submit them to the Motherisk Program by fax at 416 813-7562; they will be addressed in future Motherisk Updates.

Published Motherisk Updates are available on the College of Family Physicians of Canada website (www.cfpc.ca) and also on the Motherisk website (www.motherisk.org).