This guideline was peer-reviewed by the Maternal Fetal Medicine committee in January 2016, and has been reaffirmed for continued use until further notice.

No. 231 (Reaffirmed October 2017)

No. 231-Guidelines for the Management of Vasa Previa

This guideline has been prepared by the Diagnostic Imaging Committee and the Maternal Fetal Medicine Committee and approved by Executive and Council of The Society of Obstetricians and Gynaecologists of Canada.

Robert Gagnon, MD, Montréal, QC

Disclosure statements have been received from all members of the committees.

*Members of the diagnostic imaging committee: Lucie Morin, MD (Chair), Outremont, QC; Stephen Bly, MD, Ottawa, ON; Kimberly Butt, MD, Fredericton, NB; Yvonne M. Cargill, MD, Ottawa, ON; Nanette Denis, ARDMS, CRGS, Saskatoon, SK; Robert Gagnon, MD, Montréal, QC; Marja Anne Hietala-Coyle, RN, Halifax, NS; Kenneth Ian Lim, MD, Vancouver, BC; Annie Ouellet, MD, Sherbrooke, QC; Maria-Hélène Racicot, MD, Montréal, QC; Shia Salem, MD, Toronto, ON. Members of the maternal fetal medicine committee: Robert Gagnon (Chair), MD, London, ON; Lynda Hudon, MD, Montréal, QC; Melanie Basso, RN, Vancouver, BC; Hayley Bos, MD, London, ON; Marie-France Delisle, MD, Vancouver, BC; Dan Farine, MD, Toronto, ON; Kirsten Grabowska, MD, Vancouver, BC; Savas Menticoglou, MD, Winnipeg, MB; William Mundle, MD, Windsor, ON; Lynn Murphy-Kaulbeck, MD, Allison, NB; Annie Ouellet, MD, Sherbrooke, QC; Tracy Pressey, MD, Vancouver, BC; Anne Roggensack, MD, Calgary, AB.

Key Words: Vasa previa, antenatal hemorrhage, intrapartum hemorrhage, ultrasound, placenta

J Obstet Gynaecol Can 2017;39(10):e415–e421

https://doi.org/10.1016/j.jogc.2017.08.016

Abstract

Objectives: To describe the etiology of vasa previa and the risk factors and associated condition, to identify the various clinical presentations of vasa previa, to describe the ultrasound tools used in its diagnosis, and to describe the management of vasa previa.

Outcomes: Reduction of perinatal mortality, short-term neonatal morbidity, long-term infant morbidity, and short-term and long-term maternal morbidity and mortality.

Evidence: Published literature on randomized trials, prospective cohort studies, and selected retrospective cohort studies was retrieved through searches of PubMed or Medline, CINAHL, and the Cochrane Library, using appropriate controlled vocabulary (e.g., selected epidemiological studies comparing delivery by Caesarean section with vaginal delivery; studies comparing outcomes when vasa previa is diagnosed antenatally vs. intrapartum) and key words (e.g., vasa previa). Results were restricted to systematic reviews, randomized control trials/controlled clinical trials, and observational studies. Searches were updated on a regular basis and incorporated into the guideline to October 1, 2008. Grey (unpublished) literature was identified through searching the websites of health technology assessment and health technology assessment-related agencies, clinical practice guideline collections, clinical trial registries, and from national and international medical specialty societies.

Values: The evidence collected was reviewed by the Diagnostic Imaging Committee and the Maternal Fetal Medicine Committee of the Society of Obstetricians and Gynaecologists of Canada (SOGC) and quantified using the evaluation of evidence guidelines developed by the Canadian Task Force on Preventive Health Care.

Benefits, Harms, and Costs: The benefit expected from this guideline is facilitation of optimal and uniform care for pregnancies complicated by vasa previa.

Sponsors: The Society of Obstetricians and Gynaecologists of Canada.

Summary Statement: A comparison of women who were diagnosed antenatally and those who were not shows respective neonatal survival rates of 97% and 44%, and neonatal blood transfusion rates of 3.4% and 58.5%, respectively. Vasa previa can be diagnosed antenatally, using combined abdominal and transvaginal ultrasound and colour flow mapping; however, many cases are not diagnosed, and not making such a diagnosis is still acceptable. Even under the best circumstances the false positive rate is extremely low. (II-2)

Recommendations:

1. If the placenta is found to be low lying at the routine second trimester ultrasound examination, further evaluation for placental cord insertion should be performed (II-2B).
2. Transvaginal ultrasound may be considered for all women at high risk for vasa previa, including those with low or velamentous insertion of the cord, bilobate or succenturiate placenta, or for those having vaginal bleeding, in order to evaluate the internal cervical os (II-2B).
3. If vasa previa is suspected, transvaginal ultrasound colour Doppler may be used to facilitate the diagnosis. Even with the use of transvaginal ultrasound colour Doppler, vasa previa may be missed (II-2B).
4. When vasa previa is diagnosed antenatally, an elective Caesarean section should be offered prior to the onset of labour (II-1A).
5. In cases of vasa previa, premature delivery is most likely; therefore, consideration should be given to administration of corticosteroids at 28 to 32 weeks to promote fetal lung maturation and to hospitalization at about 30 to 32 weeks (II-2B).
6. In a woman with an antenatal diagnosis of vasa previa, when there has been bleeding or premature rupture of membranes, the woman should be offered delivery in a birthing unit with continuous electronic fetal heart rate monitoring and, if time permits, a rapid biochemical test for fetal hemoglobin, to be done as soon as possible; if any of the above tests are abnormal, an urgent Caesarean section should be performed (III-B).
7. Women admitted with diagnosed vasa previa should ideally be transferred for delivery in a tertiary facility where a pediatrician and blood for neonatal transfusion are immediately available in case aggressive resuscitation of the neonate is necessary (II-3B).
8. Women admitted to a tertiary care unit with a diagnosis of vasa previa should have this diagnosis clearly identified on the chart, and all health care providers should be made aware of the potential need for immediate delivery by Caesarean section if vaginal bleeding occurs (III-B).