Know the danger signs of CVI and VTE in pregnant patients


CHICAGO, Illinois, March 2018 — A new review of the literature on chronic venous insufficiency in pregnant women reveals considerable guidance for their treatment. CVI occurs in up to 80% of pregnant women, while around 7 of every 1,000 pregnant mothers face venous thromboembolism and pulmonary embolism.

As reported in the March edition of the Journal of Vascular Surgery: Venous and Lymphatic Disorders, clinicians from Johns Hopkins Hospital and the Greater Baltimore Medical Center led by vascular surgeon Dr. Jennifer Heller, analyzed 80 studies related to pregnancy, VTE and CVI.

Pregnancy causes significant hemodynamic changes within the circulatory system. While these are considered essential for the health of the developing fetus, the changes place considerable stress on the expectant mother’s heart and lower extremity veins.

Chronic venous insufficiency (CVI), marked by varicose veins, pain, edema, itching, skin discoloration, night cramps and heaviness are all common, particularly during the third trimester. Venous thromboembolism (VTE) and pulmonary embolism (PE) affects pregnant women nearly five times more than non-pregnant women. In fact, VTE is the number one cause of maternal death in developing countries.

With regards to the hemodynamic and physiologic changes, the review reveals pregnancy:

- Decreases systemic vascular resistance
- Increases heart rate
- Increases cardiac output
- Decreases deep venous blood flow
- Increases deep vein diameters, and
- Induces a hypercoagulable state

Treatment strategies for primary CVI in pregnancy, which occurs in up to 80% of women, were reviewed and include indications for non-pharmacologic therapies (compression, reflexology, water emersion), and pharmacologic treatments (non-steroidal anti-inflammatory drugs, fondaparinux, and low-molecular-weight heparin).
With an incidence up to 7 per 1,000 pregnancies, acute VTE remains an important issue in pregnancy. The authors provided a thorough review of VTE prevention during pregnancy, and VTE treatment during pregnancy (including indications for caval filters and management of iliofemoral thrombosis).

“It is important for physicians to comprehend the full extent of the hemodynamic factors that contribute to the increased risk of lower extremity venous disease as well as the most appropriate and effective evidence-based management options,” stated Dr. Heller. “While prophylaxis and treatment of VTE has been extensively studied in pregnancy, further research is required to look at the potential effectiveness and long-term safety profiles of new oral anticoagulants in the mother and fetus.”

She also hopes that future randomized trials will evaluate treatment strategies to relieve symptoms associated with chronic venous insufficiency during pregnancy.

Complete understanding of these issues helps physicians prepare their patients for these eventualities during pregnancy and treat venous complications effectively.

To download the complete article, open access through April 30, click http://www.vsweb.org/JVSVL-CVI.

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