

## Letter to the editors



# Vulvar varicose veins and pregnancy: childbirth management

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## Vulvar varicose veins and pregnancy: childbirth management

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## To the editors of the PAMJ Clinical Medicine

Pregnancy is presumed to be a major contributory factor in the increased incidence of varicose veins in women [1]. Vulvar varicosity is a relatively common venous disorder in women with varicose veins of the pelvis and lower extremities and in pregnant women, but there is little information in the medical literature concerning its diagnosis and management [2]. Vulvar varicosities, or varicose veins of the vulva [3] are dilated veins in the labia majora and labia minora, and are estimated to occur in 22%-34% of women with varicose veins of the pelvis [4]. Vulvar varicose veins occur in approximately 4% of women and are rarely seen outside pregnancy [5]. When it occurs to the women presenting in labor for delivery, the question asked is which mode of delivery should be chosen and how the patient should be managed? Whether the cesarean section or the vaginal delivery. In the goal of sharing our experience, we are relating here a case of a young women who came to our health care center in labor and we suddenly discovered a vulvar varicose veins touching the whole vulvar. It's about a patient aged of 21 G2P1 without any particular pathology history admitted in labor for delivery with extensive left and right vulvar varicose (Figure 1) which started to appear since the 4<sup>th</sup> month of the pregnancy. The pregnancy was not monitored so any investigation was done. The exam found also a bilateral leg tumefaction which seemed to be a sign of deep vein thrombosis. A vulvar ultrasound showed dilated vessels in the both side of the vulvar and Venous Doppler ultrasound of the lower limbs did not find any direct or indirect sign of deep vein thrombosis. The vaginal delivery was accepted with the instrumental extraction using obstetric suction cup. They were no incident during the delivery and the varicosities was reduced in term of volume after the delivery. The pathogenesis of vulvar varicosities is mainly valvular dysfunction, but the fundamental etiology is unclear [6]. The anatomical basis for the development of vulvar varicosities relates to the connections between the veins of the pelvis and

external genitals [7]. Vulvar veins drain into the external and internal pudendal veins, which deliver blood to the great saphenous vein and internal iliac vein. The veins of the labia majora and labia minora anastomose with the utero vaginal plexus. In addition, the connection to the pelvic veins is provided via the obturator vein and superficial circumflex iliac vein, as well as the groin, clitoral, and perineal perforant veins [2]. Risk factors associated with vulvar varicose veins include increasing age, standing for long periods, genetics, and increased levels of estrogens and progesterone [8]. There is still no consensus on the mode of delivery in this kind of situation. The risk of vaginal delivery might be the fact that the vulvar varicose veins may cause extensive bleeding due to the possible rupture during labor and vaginal delivery. Cases of successful vaginal birth have been described in the presence of huge vulvar varicose veins. However, cases of massive bleeding from ruptured vulvar varicosities following normal delivery have also been reported [6].

### Conclusion

The management of the childbirth when a patient presents vulvar varicose veins has no clear consensus. The mode of delivery has to be properly evaluated by the obstetrician in charge. Each patient should be considered according to her own context. There's no recommendation of systematic caesarean when facing such cases.

### Competing interests

The authors declare no competing interests.

### Authors' contributions

All the authors participated to the present work from the patient care to the writing of the manuscript. All the authors read and approved the final version of the manuscript.

## Figure

**Figure 1:** extensive left and right vulvar varicosities

## References

1. Rebecca MD Smyth, Nasreen Aflaifel, Anthony A Bamigboye. Interventions for varicose veins and leg oedema in pregnancy. *Cochrane Database of Systematic Reviews*. 2015 Oct 19;2015(10): CD001066. **PubMed** | **Google Scholar**
2. Sergey G Gavrilov. Vulvar varicosities: diagnosis, treatment, and prevention. *International Journal of Women's Health*. 2017; 9 463-475. **PubMed** | **Google Scholar**
3. Saveliev VS, Pokrovsky AV, Zatyevakhin II, Kirienko AI. Rossiiskie klinicheskie rekomendatsii po diagnostike i lecheniyu khronicheskikh zabolevanii ven. *Flebologia*. 2013;7: 18-20.
4. Fassiadis N. Treatment for pelvic congestion syndrome causing pelvic and vulvar varices. *Int Angiol*. 2006 Mar;25(1): 1-3. **PubMed** | **Google Scholar**
5. Bell D, Kane PB, Liang S, Conway C, Tornos C. Vulvar varices: an uncommon entity in surgical pathology. *Int J Gynecol Pathol*. 2007 Jan;26(1): 99-101. **PubMed** | **Google Scholar**
6. Furuta N, Kondoh E, Yamada S, Kawasaki K, Ueda A, Mogami H *et al*. Vaginal delivery in the presence of huge vulvar varicosities: a case report with MRI evaluation. *Eur J Obstet Gynecol Reprod Biol*. 2013 Apr;167(2): 127-31. **PubMed** | **Google Scholar**
7. Thomas ML, Fletcher EW, Andress MR, Cockett FB. The venous connections of vulval varices. *Clin Radiol*. 1967;18: 313-317. **Google Scholar**
8. Beebe-Dimmer JL, Pfeifer JR, Engle JS, Schottenfeld D. The epidemiology of chronic venous insufficiency and varicose veins. *Ann Epidemiol*. 2005 Mar;15(3): 175-84. **PubMed** | **Google Scholar**



**Figure 1:** extensive left and right vulvar varicosities