Regarding "Correlation between pelvic congestion syndrome and body mass index"

Chronic venous disease is a significant and usually overlooked health problem all over the world affecting both men and women. Clinical manifestations of dilating venous disease, namely, varicocele, peripheral varicose veins, pelvic congestion syndrome (PCS), and hemorrhoid, depend on the affected vascular territory. Contributing factors might show changes in accord with involved vascular territory, and female sex, pregnancy, long standing times, and obesity are the major common established risk factors for dilating venous disease.[1]

We have recently read with great interest the article published by Nanavati et al,[2] which aimed to investigate whether there is an association between PCS and body mass index. In their retrospectively designed study, they have found that patients with PCS have lower body mass index and that obese patients have more frequent peripheral varicose veins in the legs. Accordingly, they have suggested that lack of hormonal protective effects in leaner PCS patients may be the underlying mechanism because of the fact that PCS patients are occasionally multiparous and premenopausal. In addition, they have also concluded that the location of adipose tissue in obese patients may contribute to varicose vein dilation in the legs. According to the authors, abdominal fat tissue may prevent ovarian or pelvic varicose vein dilation in obese patients in a mechanical manner. With another point, the authors discuss the presentation of the same vascular wall abnormality by assessing leg varicosities, pelvic reflux, ovarian vein dilation, gluteal varix, and vulvar varix in different venous regions. It is reasonable to expect some differences in terms of clinical, demographic, physical, and anatomic parameters, depending on the vascular region involved. Starting from the toe tips to the heart, venous vascular structures have a continuous integrity. A systemic vascular wall abnormality would cause related clinical manifestations, depending on the associating contributing risk factors in the vascular territory. The main predominating factors might be lean body mass for PCS and varicocele as well, long standing and obesity for leg varix, constipation and pregnancy for hemorrhoid. In this context, it is reasonable to expect different prevalence of leg varix in patients with PCS regarding the body mass index. We agree with the authors that factors such as leaner body, hormonal changes, and obesity may affect the vascular structure integrity. On the other hand, another message might be gathered from the findings of Nanavati et al; in the presence of vascular wall abnormality, venous varices show up with different clinical manifestations, depending on the vascular territory and contributing factors.[3]

As mentioned, chronic venous disease is a significant and overlooked health problem. Its clinical manifestations and the association between the diseases, symptoms, and pathogenesis vary in different vascular regions. Future studies will help identify the exact mechanism of different clinical manifestations.

Selcuk Ozturk, MD

Department of Cardiology
Ankara Education and Research Hospital
Ankara, Turkey

Ertan Yetkin, MD

Department of Cardiology
Yenisehir Hospital
Mersin, Turkey

REFERENCES

1. Yetkin E, Ileri M. Dilating venous disease: pathophysiology and a systematic aspect to different vascular territories. Med Hypotheses 2016;91:73-6.
2. Nanavati R, Jasinski P, Adrahtas D, Gasparis A, Labropoulos N. Correlation between pelvic congestion syndrome and body mass index. J Vasc Surg 2018;67:536-41.
3. Ozturk S, Akbaba KT, Kılıc S, Cıcek T, Peskırcıoglu L, Tandogan I, et al. Venous leg symptoms in patients with varicocele: a multicenter assessment study (VEIN-TURKEY study). Phlebology doi: 10.1177/0268355518777110.

https://doi.org/10.1016/j.jvsv.2018.08.013