

The role of ovarian varicose veins and varicocele in cancer and venous thrombosis

Kennedy Gonçalves Pacheco and **Maria Raquel Fortes de Oliveira**
Member of the Brazilian Society SBACV, Brazil

Background: Changes in the ovaries' and the testicles' phenotypes are associated to an increase in the risk of cancer and venous thrombosis. Varicocele and ovarian varicose veins can change the phenotype of the germinating glands. In this study, we made it our goal to evaluate the prevalence of ovarian varicose veins and varicocele in patients with cancer and venous thrombosis.

Material and Method: 54 patients with cancer and 98 patients in the control group who were diagnosed with venous thrombosis were included in this study. All of these patients were examined through ultrasound with vascular Doppler in order for us to investigate varicocele in men and ovarian varicose veins in women.

Result: Of a total of 14,800 patients, 152 with cancer and venous thrombosis were selected (1.02%). The group with cancer presented a significantly ($p = 0.0029$) higher proportion of varicose veins (96.3%) next to the germinating glands than the group with venous thrombosis (84.7%). The comparison between the groups with cancer and venous thrombosis was evaluated by the χ^2 test or the Fisher exact. The significance criteria adopted was the level of 5%.

Conclusion: The group with cancer presented a significantly higher proportion of varicose dilation than the group with venous thrombosis. Varicose veins next to the testicles and the ovaries are associated to oxidative stress, which can change the phenotype of germinating glands, provoking abnormalities in the hypothalamic-pituitary-gonadal axis, interfering in gene mutation in patients with cancer and venous thrombosis.