[LETTERS TO THE EDITOR]

A Case of Massive Pulmonary Embolism Following Varicose Vein Surgery That Was Successfully Treated with Thrombolytic Therapy

Key words: deep vein thrombi, pulmonary embolism, varicose vein surgery

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The Authors Reply It is very well known that the mortality in acute pulmonary embolism patients presenting with cardiac arrest is very high. One of the aims of our manuscript is to emphasize that thrombolytic therapy is a lifesaving choice of treatment even in resuscitated massive pulmonary embolism patients. The other aims of our manuscript are to highlight the fact that massive pulmonary embolism can occur even after minor surgical procedures and to discuss the risk of pulmonary embolism in patients with superficial venous thrombi.

Response to comment 1

The patient went into cardiac arrest soon after her admission to the emergency department. After 3-min resuscitation, sinus rhythm was maintained, and echocardiography was performed within 2 minutes following resuscitation. Our manuscript was written in 2014, and according to the Turkish Thoracic Society Diagnosis and Treatment of Pulmonary Embolism Guidelines at that time, echocardiography was the first diagnostic procedure to be performed for patients suspected of having massive pulmonary embolism. If the echocardiography findings were suggestive of pulmonary embolism, lower extremity venous Doppler ultrasonography was recommended. If ultrasonography revealed thrombi, thrombolytic therapy was recommended, otherwise pulmonary computed tomography angiography was recommended. At the time, since it was easier and faster to perform, we chose pulmonary CT angiography to obtain a definitive diagnosis. After CT, the patient was sent to the intensive-care unit (ICU). Soon after her admission to the ICU, a second cardiac arrest occurred. After successful resuscitation, throm-

bolytic therapy was given. The door-to-needle time was only 25 minutes.

The management of such a patient in a rural community hospital is not easy. However, we were thankfully able to diagnose, treat and revive the patient in a short amount of time in a center with a relatively limited number of health care providers as well as limited medical equipment.

Response to comment 2

When we evaluated the patient's medical recordings, the deep veins were free of thrombi according to Doppler ultrasonography findings before the surgery. During the follow-up period, venous Doppler ultrasonography revealed thrombus in a superficial vein with no thrombi in the deep veins. The patient had not been administered anticoagulants before or after the surgery. She also had no history of immobilization after the surgery.

Response to comment 3

The patient underwent surgery with spinal anesthesia. During the follow-up period, thrombophilia tests were done, and all of them showed normal results. Regarding the probability of occult cancer, tumor marker tests, an examination of the breasts, mammography, whole-abdomen ultrasonography, a gynecological examination and cervical smear test were performed. All of these findings were normal.

In conclusion, it is important to approach and treat patients according to the current guidelines. However, in some circumstances, especially in rural hospitals with limited resources, the management strategies may be best guided by physicians' experiences in light of treatment guidelines.

The authors state that they have no Conflict of Interest (COI).

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