NCCN Issues First Guidelines for Deep Vein Thrombosis Treatment in Cancer Patients

For oncologists pondering what agent is the right one for protecting patients against deep vein thromboses, there is little evidence that one drug is superior to another, according to the first guidelines on this condition from the National Comprehensive Cancer Network (NCCN). The writers of the NCCN guidelines could find few differences among available medicines, but they have put forth treatment recommendations.

“We suggest that doctors select an agent based on cost-effectiveness, on the most reliable agent in their hands, and on individual patient conditions,” said Lawrence Wagman, M.D., chairman of the NCCN subcommittee and emeritus professor of surgery at the City of Hope Cancer Center, Duarte, Calif.

Wagman outlined the guidelines at the 11th annual conference of the NCCN, a consortium of 19 tertiary cancer hospitals around the United States. Previous guidelines developed by the NCCN have been adopted by hundreds of other facilities in the United States and abroad and are used in federal demonstration projects.

Surgery and chemotherapy can increase the risk of blood clots and sometimes reduce the body’s ability to produce anticoagulants. “Cancer increases the risk of deep vein thrombosis by four to seven times over people who do not have cancer,” said Michael Streiff, M.D., assistant professor of medicine–hematology at Johns Hopkins University in Baltimore.

The NCCN guidelines have three parts: One addresses the treatment of venous thromboembolism in cases of patients with cancer or who are suspected of having cancer; a second looks at patients who develop deep vein thromboses; and third examines patients who experience pulmonary emboli.

The therapy guidelines are aimed at in-hospital treatment and list the following drugs for anticoagulation:

- Unfractionated heparin: 5,000 units subcutaneously three times a day
- Low-molecular-weight heparin, dosed according to standard operating procedures of individual institutions, with either dalteparin, enoxaparin, or tinzaparin
- Pentasaccharide, fondaparinux, 2.5 mg subcutaneous daily

If patients cannot take anticoagulation medications, compression devices can be used, including graduated compression stockings.

The guidelines suggest using low-molecular-weight heparin for long-term therapy for prevention of recurrent deep vein thrombosis in patients with advanced or spreading cancer. The minimum time for treating deep vein thrombosis is 3–6 months; pulmonary embolism requires 6–12 months of treatment.

Before making a decision on treatment of catheter-related deep vein thrombosis, NCCN suggests imaging. The guidelines recommend ultrasound as the first choice, followed by computer-assisted tomography or magnetic resonance imaging, and as a final alternative, a venogram.

—Ed Susman