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Editorial

The role of direct oral anticoagulants in venous thromboembolic disease in gynecologic cancer

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▸ See the article "Comparison of rivaroxaban and dalteparin for the long-term treatment of venous thromboembolism in patients with gynecologic cancers" in volume 31, e10.

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The current treatment of choice for cancer-associated venous thromboembolism (VTE) is low molecular weight heparin. Of them, dalteparin is the only one that has been approved for use in cancer-associated VTE. There have been efforts to use direct oral anticoagulants (DOACs) for cancer-associated VTE because it is easy to use. Previous randomized controlled trials showed that the non-inferiority of DOAC in effectiveness and safety in the treatment of cancer-associated VTE [1,2]. However, the incidence of clinically relevant non-major bleeding was higher for DOAC. Especially, gastrointestinal bleeding was the problem. Based on these evidences, DOAC is regarded as a reasonable alternative to dalteparin in the treatment of cancer-associated VTE. These randomized controlled trials included only small number of gynecologic cancer patients. Therefore, further evaluation in gynecologic cancer patients is needed to properly guide the use of DOAC in gynecologic cancer-associated VTE. Until now, only two small retrospective studies evaluated the role of DOAC in gynecologic cancer-associated VTE [3,4]. One was a pilot case-control study comparing rivaroxaban and warfarin or low molecular weight heparin and the other was an observational study including patients who were treated with rivaroxaban [3,4]. Both of these studies were retrospective including only a small number of study subjects, and it was difficult to draw any definitive conclusion [3,4].

In this issue, Lee et al. [5] reported the largest study comparing DOAC and dalteparin in gynecologic cancer-associated VTE [5]. Although this study is also limited because it was a retrospective study and included small number of study subjects, the study design was better and the outcomes were similar to the outcomes of the previous randomized controlled trials [5]. The effectiveness and safety of DOAC did not differ from those of dalteparin [5]. However, clinically relevant bleeding was higher for DOAC [5]. Although DOAC can be used as an alternative to dalteparin in the treatment of gynecologic cancer-associated VTE, caution is needed for patients with gastrointestinal or urologic involvement or who underwent cancer surgery before, because the risk of bleeding was higher in these patients as the authors suggested [5]. Now is the time for randomized controlled trials to be conducted to evaluate the role of DOAC in the gynecologic cancer-associated VTE.

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