

Secondary Prevention for Stroke by Direct Oral Anticoagulants (DOACs) in Patients with Atrial Fibrillation and Cancer

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[Background and Aims] Cardiovascular disease (CVD) is the leading cause of morbidity and mortality in cancer survivors. However, it is still unclear about the efficacy and safety of direct oral anticoagulants (DOACs) for prevention in cardioembolic (CE) stroke patients with atrial fibrillation (AF) and cancer.

[Methods] We extracted the patients with AF and active cancer from consecutive CE stroke 1250 patients treated with DOACs for secondary prevention in our stroke data base from March, 2011 to the April, 2018 and analyzed retrospectively

[Results] The number of the consecutive CE stroke patients which coexisted AF and active cancer was 88 (7.0%), interestingly that was significant higher than in non-CE stroke patients with cancer (3%). In CE patients with cancer, the CHADS₂ Score was significant lower (3.0 ± 1.1) than CE stroke patients without cancer (3.9 ± 0.9). In 66.7% of patients with cancer, chemotherapy was carried out, considering the interaction of DOACs and anticancer agents to avoid organ functional disorders. Whereas no significant decline of renal or liver function was observed after chemotherapy, notably, heart failure significantly occurred (34%). Overall, in an observation period (median: 606 days and IQR: 331–1333), Ischemic-stroke was observed in 2.3% of patients with AF and cancer, no intracranial-hemorrhage, no major bleeding, and minor bleeding 4.3%. Mortality was 12.7% (due to a cancer or heart failure).

[Conclusions]The efficacy and safety of DOACs were suggested in CE stroke patients with AF and cancer. It is important to consider the interaction with the pharmacokinetics of each DOACs with anticancer agents, incorporating the insight of cardio-oncology into the stroke prevention.