



TERAPIE ANTICOAGULANTI E GESTIONE DELLE
COMPLICANZE

BLEEDING COMPLICATIONS DURING ANTICOAGULATION WITH DOACS FOR NVAF AND THEIR MOST COMMON RISK FACTORS

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Background and Aims. CHADS₂/VASc is a score used in the last 15 years to evaluate thrombotic risk in patients with non-valvular atrial fibrillation (NVAf) to address them to anticoagulation with direct oral anticoagulants (DOACs). Yet after years of clinical experience CHADS₂/VASc has been discovered to have also some skill in the identification of bleeding risk. Yet a fine evaluation of its potential role in patients that experienced bleedings during anticoagulation with DOACs is still matter of discussion. Therefore, we analyzed risk factors for bleedings present in two different risk score (i.e. CHADS₂/VASc and RIETE) in 50 inpatients in internal medicine with recent bleeding. The aim of the study is to identify a possible single item that may help to predict possible bleeding during anticoagulation.

Methods. We retrospectively analyzed bleeding risk factors in patients hospitalized in internal medicine ongoing DOACs for any reason. We included in our analysis items presents in two different score as RIETE score for anticoagulated patients after a venous thromboembolism and as CHADS₂/VASc. Furthermore, we included the chronic use of NSAIDs for any reasons. Items evaluated as bleeding risk factors are summarized in table 1.

Results. Type of bleeding, previous bleeding, ongoing heart failure, kidney failure, ongoing cancer, female sex, age 40-74 years, age ≥ 75 years, chronic use (not abuse) of NSAIDs, chronic anaemia, previous venous thrombosis, diabetes, hypertension, other thrombosis in secondary prevention were the items retrospectively analyzed; all of them extracted by two different scores as CHADS₂/VASc and RIETE. Sex distribution and age ≥ 75 years were equally distributed in the population. Gastrointestinal bleeding was the most common bleeding complication. Hypertension and diabetes were greatly represented in the cohort as far as in the general population. Chronic anaemia, previous bleeding, kidney failure, other thrombotic disease in secondary prevention and heart failure are frequently present in patients with bleedings during anticoagulation with DOACs for NVAf.

Conclusions. Phase III clinical trial gave us the chance to understand that cardioembolic stroke prophylaxis with DOACs were not associated to bleedings in particular intracranial hemorrhage. However, in our daily clinical management we noted an increased rate of gastrointestinal bleeding. This difference with phase III clinical trial was probably due to the long-term administration of DOACs in real life compared to the clinical observation of trials (i.e. shorter than 24 months). For these reasons we tried to identify items present in hemorrhagic risk score used in clinical practice hoping to identify a possible major bleeding risk factor. Therefore our cross analysis with items present in RIETE score (a score validated for bleeding risk during anticoagulation) and CHADS₂/VASc (a score used to start anticoagulation for thrombotic risk in NVAf but also associated to bleeding prediction) we find that chronic anaemia, previous bleeding, kidney failure, other thrombotic disease in secondary prevention and heart failure are the most common risk factors in patients hospitalized in internal medicine with bleedings during anticoagulation with DOACs. Further studies on larger cohorts are warranted to confirm our findings, but seems that the complexity of patients is more frequent of a single common risk factor in the bleeding complication during long term anticoagulation for DOACs.

Table 1. Baseline clinical features of the 50 cases studied

Clinical characteristics		
Total	Number	50
Age 40 to 74, number (%)		50
Age over 75, number (%)		50
Female gender, number (%)		50
Gastrointestinal bleeding, number (%)		65
NSAIDs use, number (%)		6
Comorbidities, number (%)		
Chronic Heart Failure		26
Hypertension		72
Chronic Anaemia		46
Chronic kidney disease		33
Diabetes mellitus		20
Active malignant neoplasia		6
Previous venous thrombosis		6
Previous bleeding		26
Other thrombotic disorder in treatment		33