The new direct oral anticoagulants: a three years' experience

P. Caruso, G. Furlanis, M. Morelli, T. Cattaruzza, A. Granato, L. Stragapede, L. Tesolin, M. Naccarato, P. Manganotti

Neurological Clinic
Azienda Sanitaria Universitaria Integrata di Trieste - *Department of Medical, Surgical and Health Sciences*
University of Trieste – TRIESTE – Italy

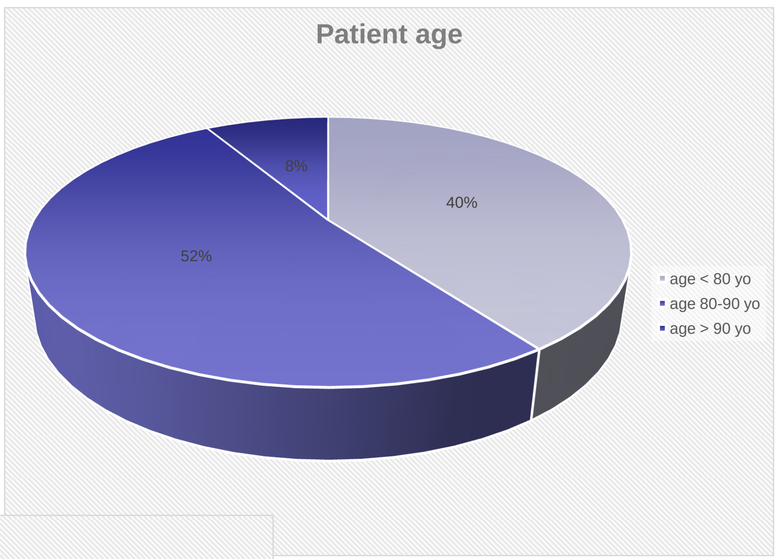
Background and data analysis

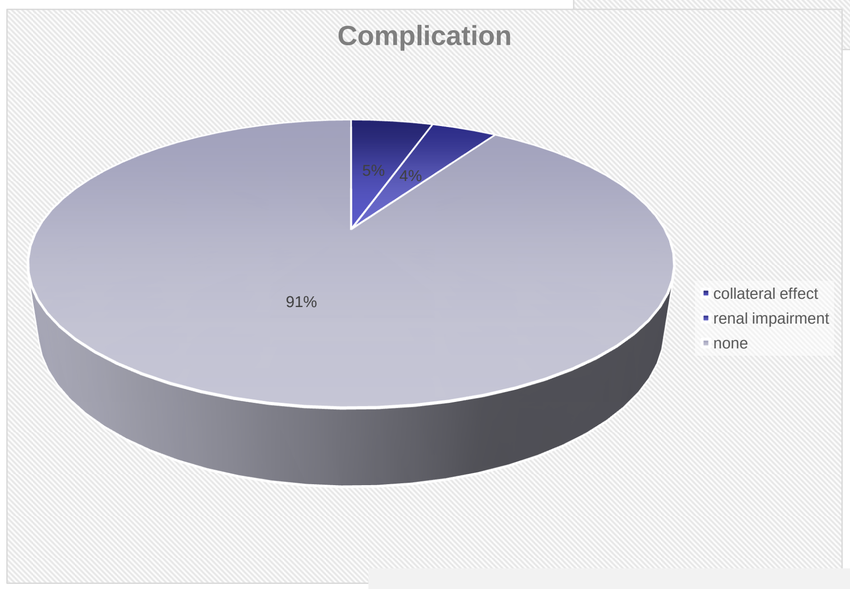
Atrial fibrillation (AF) is the most common cardiac arrhythmia found in the clinical practice associated with an increased risk of thromboembolism and cardio embolic stroke. It is responsible for at least 20% of all strokes, over one-third of strokes affect people over 80 years of age with AF. The use of anticoagulants is the most effective standard therapy to prevent stroke and systemic events in patients with AF (more beneficial than antiplatelet). AVK has been used for decades as the first choice therapy for stroke prevention in those patients. Anyway the use of anticoagulant therapy is often limited because of the high risk of bleeding events. Moreover, AVK therapy has an optimal anticoagulation effect only for Time in Therapeutic INR Range (TTR value) >70%. New oral anticoagulants (DOACs) have been evaluated in different large phase III trials for the prevention of thromboembolic events in patients with non-valvular AF and improved efficacy and safety compared with warfarin has been demonstrated.

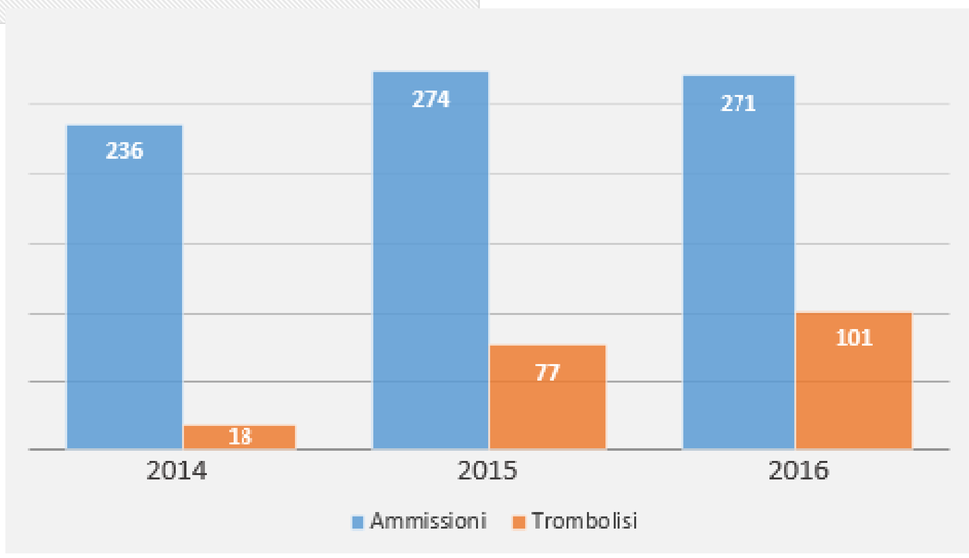
Personal data

During the last years is rapidly increasing the number of patient admitted to our Neurological Clinic for a sudden onset of stroke (2014: 236 patients, 18 treated with thrombolytic therapy; 2015: 274 pz, 77; 2016 until now, 271 pz, 101 treated with thrombolysis). In a wide percentage of cases atrial fibrillation was responsible of stroke, and, as is already know, the best long term treatment is the anticoagulation.

From October 2013 to April 2016 we prescribed DOACs for 97 patients affected by an ischemic stroke due to non-valvular AF. Over the 54 patients treated from 2013 to 2015, in 47 cases 1 and 2 years controls have been reported; the remained patients have received DOACs in the last months or are in list for the 1 year control. Three patients died because of clinical complication not related to treatment adverse events or systemic/cerebral embolism. In two patients treatment was interrupted due to an incremented bleeding risk (both were found to present malignancy with surgical intervention necessity). Six patients were lost in the follow-up period (mainly due to a different residence change). In four of the 97 patients reduction dose of DOACs was needed because of renal impairment. Nausea, dyspepsia of minor bleeding (mostly epistasis) was reported only in five of the 97 patients. Almost all patients showed a CHADSVASc score ≥ 4. Regarding age the 59% of patients aged ≥ 80 years old and the 8,2% aged > 90 years old. Neither major bleeding nor systemic/cerebral embolism were reported. None interaction with other therapy and comorbidities were detected.







Conclusions

In line with literature data we believe that DOACs administration is related to cerebral and systemic embolism reduction and not major bleeding complication. More real life data are needed to compare physicians experience and to better guide the appropriate therapeutic choice for each patients.

References

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