

What is the Current Practice of Restarting Oral Anticoagulant in Patients with Subdural Haemorrhage? Fahad A. Alkherayf MD, MSc, CIP, FRCSC; Philip Wells MD, MSc, FRCPC; Charles B. Agbi MD FRCSC; Harrison Westwick BSc

Divsion of Neurosurgery, The Ottawa Hospital and University of Ottawa



# Introduction

Patients with mechanical heart valves (MHV) who present with subdural haemorrhage (SDH) are initially treated by reversing their coagulopathy. However, these patients will ultimately require that their oral anticoagulant (OAC) be restarted. The time at which OAC are restarted is critical. Too early may increase the risk of recurrent bleeding, while withholding anticoagulants increases the patient's risk of thromboembolic events.

# **Learning Objectives**

By the conclusion of this session, participants should be able to: 1) Describe the importance of restarting OAC in patients with MHV and SDH) Discuss what should be the ideal time of restarting OAC in patients with MHV, 3) Identify factors which may influence the timing of restarting OAC.

### Methods

We conducted a survey that included North American members of the AANS and International Society of Thrombosis and Haemostasis (ISTH).Our survey also aimed to examine the relationship among physician's speciality, country of practice, type of practice, average number of cases they managed annually, years of practice, and timing of restarting OAC.

Univariate, bivariate and multivariate analysis was done. Analysis was also done to examine if participant responses to OAC restarting time were different for patients with different clinical risk factors. These risk factors included age, presence of surgical intervention, haematoma size, patient`s CHADS2 score, recent PE, recent DVT, MHV type, MHV location and multiplicity. Multivariate analysis and Poisson regression model were conducted to examine the effect of participant characteristics and demographics on the time of restarting OAC. All analyses were performed at the conventional alpha value of 0.05. All analyses were performed using STATA 11, SPSS, R2.15.1 and Microsoft Excel.

# Results

A total of 504 physicians responded to our survey (34.31%). In patients with no risk factors OAC were resumed within: 3 days by 14.5%, 4-5 days by 22%, 6-7 days by 19%, 8-14 days by 20% while the rest of the participants resumed them after 2 weeks. Craniotomy (P 0.001), haematoma size (P 0.001), recent PE (P 0.001) and multiple MHVs (P 0.001) were significant predictors for restarting OAC.

Annual numbers of cases managed by participants' were found to be the only statistically significant (P 0.01) participant`s characteristic which influenced their decision.

### Conclusions

There is a wide variation in the current practice of neurosurgeons when they face the dilemma of managing patients with SDH and MHV.

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Please contact alkherayf@hotmail.com for further references.