Phenprocoumon

Inhibition of the synthesis or activity of Factor X is the mechanism of action for many anticoagulants in use today. Warfarin, a synthetic derivative of coumarin, is the most widely used oral anticoagulant in the US. In some European countries, other coumarin derivatives (phenprocoumon and acenocoumarol) are used. These agents are vitamin K antagonists (VKA). Vitamin K is essential for the hepatic synthesis of Factors II (prothrombin), VII, IX and X.

Mirzayan et al. investigated the outcome of 49 patients who were identified retrospectively to have a SDH while receiving oral anticoagulation.

Most bleeding occurred while patients were within the recommended therapeutic window for oral anticoagulation. Mortality was 15%. The event-free survival probability was higher in the group of patients with reinstitution of phenprocoumon therapy than in the group without. Over a median follow-up of 32 months, thromboembolic events occurred in 4 of 23 patients without oral anticoagulation versus in none of 15 patients with phenprocoumon; hemorrhagic complications occurred in 1 in 23 versus 3 in 15 patients.

Reinstitution of oral anticoagulation with phenprocoumon after previous SDH appears to have an acceptable risk for hemorrhagic complications. Decision making might consider case-by-case differences. To establish specific guidelines, prospective large cohort studies are needed [1)].

Administration of phenprocoumon and older age might increase the risk of poor outcome in patients with cSDH. Neither the administration of phenprocoumon nor antiplatelet drug influenced the recurrence rate of subdural hematoma in a patient cohort [2)].

Case report

Delayed traumatic intracerebral haemorrhage (DTICH) constitutes a serious complication of head injury, and several studies have set out to identify predisposing clinical variables and appropriate management strategies. Halatsch et al. report a distinct and particularly malignant course of DTICH associated with oral anticoagulant therapy [3)].

1)
Mirzayan MJ, Calvelli K, Capelle HH, Weigand J, Krauss JK. Subdural Hematoma and Oral Anticoagulation: A Therapeutic Dilemma from the Neurosurgical Point of View. J Neurol Surg A Cent Eur Neurosurg. 2016 Jan;77(1):31-5. doi: 10.1055/s-0035-1558407. Epub 2015 Aug 20. PubMed PMID: 26291887.
2)
Abboud T, Dührsen L, Gibbert C, Westphal M, Martens T. Influence of antithrombotic agents on recurrence rate and clinical outcome in patients operated for chronic subdural hematoma. Neurocirugia (Astur). 2017 Nov 6. pii: S1130-1473(17)30116-1. doi: 10.1016/j.neucir.2017.09.006. [Epub ahead of print] PubMed PMID: 29122534.
3)
Halatsch ME, Markakis E. Phenoprocoumon, head trauma and delayed intracerebral haemorrhage.

Funct Neurol. 1999 Jul-Sep;14(3):155-7. PubMed PMID: 10568216.