NOVEL ORAL ANTICOAGULANTS

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Anticoagulant medicines play an important role in short term treating and preventing of thromboembolic cerebral and cardiovascular events in emergency or after hospital discharge. Currently, several novel anticoagulants are created and physicians need to improve their knowledge about advantages and complications of these agents. (Harter et al., 2015). Direct oral anticoagulants (DOCs), also known as novel oral anticoagulants are used to treat acute coronary syndrome, cancer associated venous thromboembolism and cerebral stroke. (Sikorska & Uprichard, 2017). Although, it is proven that vitamin K antagonist, Warfarin reduces the risk of stroke after atrial fibrillation (AF), anticoagulant-associated intracerebral hemorrhage is observed. (Caso, & Masuhr, 2019). DOCs directly targets specific proteins in the coagulation cascade and are superior to warfarin according to rate of intracranial hemorrhage, although timing of initiation and dose ranging of DOCs fluctuate. Dibagatran, Rivaroxaban, Apixaban and edoxaban are some DOCs, their characteristics and outcomes in patients with cerebral venous thrombosis were studied. Data revealed that efficacy for DOCs was acceptable. As well as occasion adverse events as like death and hemorrhage for each DOCs were reported. Although Drug monitoring in DOCs is elementary for assessing anticoagulant activity of drugs. Since non-specific conventional laboratory tests are not reliable assessment of DOCs effects, dilute thrombin time (TT) and ecarin-based assays for assessing Dabigatran activity as a thrombin inhibitor are considered. Apixaban, Edoxaban and Rivaroxaban inhibit the action of activated factor X and calibrated anti-Xa assays are accurate for DOCs measurement (Seiffge et al., 2020).

References: