Anticoagulant

- From Skin to Sinus: A Rare Case of Cerebral Venous Sinus Thrombosis Caused by Occipital Subcutaneous Abscess
- ROS-Responsive Cinnamaldehyde Polymer Nanoparticles Loaded with Puerarin for the Treatment of Atherosclerosis
- Are isolated linear fractures over major dural venous sinuses a risk factor for sinus thrombosis in mild TBI?
- APOE ε4 and Risk of Intracranial Hemorrhage in Patients With Atrial Fibrillation Taking Apixaban
- Thrombosis and Coagulopathy
- Postoperative Initiation of Thromboprophylaxis in patients with Cushing's Disease (PIT-CD): a randomized controlled trial
- Prediction Model to Optimize Long-Term Antithrombotic Therapy Using Covert Vascular Brain Injury and Clinical Features
- Effectiveness of subdural evacuating port system (SEPS) and middle meningeal artery embolization (MMAE) for chronic subdural hematomas - a multicenter experience

---

Anticoagulants are a class of drugs that work to prevent the coagulation (clotting) of blood.

Such substances occur naturally in leeches and blood-sucking insects. A group of pharmaceuticals called anticoagulants can be used as an injection into human beings as a medication for thrombotic disorders.

Oral anticoagulants are also available. Some anticoagulants are used in medical equipment, such as test tubes, blood transfusion bags, and renal dialysis equipment.

A comprehensive knowledge of novel anticoagulants is an important part of current neurosurgical practice. While warfarin, heparin and its low molecular weight derivative, enoxaparin, have formed the mainstay of treatment for atrial fibrillation, valvular heart disease and the prevention of venous thromboembolism for over 30 years [1] , new agents have recently been approved that promise to revolutionize the treatment of these conditions. There are compelling medical reasons driving the adoption of these agents and they will have an important impact on neurosurgical practice [2].

Heparin

see Heparin.

Direct Oral anticoagulant

see Direct Oral anticoagulant.

Indications

Perioperative anticoagulant prophylaxis for postoperative venous thromboembolism (VTE) in neurosurgical patients has not gained wide acceptance due to the fear of intracranial bleeding. Physical methods give a worthwhile reduction of postoperative VTE but there still remains a substantial residual incidence. In other clinical indications, low molecular weight heparins have proven to be effective for prophylaxis of VTE when administered postoperatively, with the advantage of no bleeding enhancement during surgery.

Anticoagulation after ischemic stroke was a topic of major controversy for decades until a series of Randomized controlled trials consistently showed no net benefit of heparin or warfarin compared with aspirin [3) 4)].

see Anticoagulation in glioblastoma.

Complications

see Intracranial hemorrhage and anticoagulation.

Resumption

Anticoagulation Resumption.

1)
Verma AK. Dabigatran etexilate: A new thrombin inhibitor. Med J Aust. 2010;192:407–12.
2)
Dwyer CM, Damodaran O, Heckelmann M, Sheridan MM. What neurosurgeons need to know about dabigatran etexilate (pradax(®)/pradaxa(®)/prazaxa(®). Asian J Neurosurg. 2015 Apr-Jun;10(2):66-8. doi: 10.4103/1793-5482.144156. PubMed PMID: 25972932; PubMed Central PMCID: PMC4421970.
3)
PA Sandercock, C Counsell, AK Kamal Anticoagulants for acute ischaemic stroke Cochrane Database Syst Rev (2008) CD000024.
4)
PA Sandercock, LM Gibson, M Liu Anticoagulants for preventing recurrence following presumed non-cardioembolic ischaemic stroke or transient ischaemic attack Cochrane Database Syst Rev (2009) CD000248.