

SCIENCE TIMES

N19-N32

A Sordid Affair: Spike Sorting and Data Reproducibility

Heidi Y. Febinger, Alan D. Dorval, John D. Rolston

Brainstem Hypoperfusion as the Inciting Factor in the Development of Essential Hypertension

Kamil W. Nowicki, Richard Jennings, Raymond F. Sekula, Jr

Novel Photoconductive Material Demonstrates Potential for Dose Reduction in X-Ray Imaging

G. Damian Brusko, John Paul G. Kolcun, Michael Y. Wang

Targeting Epidermal Growth Factor Receptors in Recurrent Glioblastoma Via a Novel Epithelial Growth Factor Receptor-Conjugated Nanocell Doxorubicin Delivery System

Kevin Kwan, Julia R. Schneider, Andrew Kobets, John A. Boockvar

MeTro: A New Surgical Sealant

David L. Penn, John H. Chi

Novel Autochthonous in vivo Model Identifies Genetic Drivers and Functional Suppressors in Glioblastoma

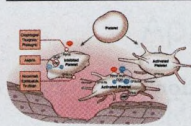
David J. McCarthy, Ricardo J. Komotar, Robert M. Starke, E. Sander Connolly

A Second Randomized Trial Comparing General Anesthesia to Conscious Sedation in Acute Ischemic Stroke Patients Undergoing Endovascular Treatment

Benjamin Zussman, Gregory Weiner, Andrew Ducruet

Regaining Consciousness: The Effect of Vagal Nerve Stimulation on a Patient in a Permanent Vegetative State

Reid Hoshide, Rahul Jandial



On the Cover

This month's cover highlights the article "Glycoprotein IIb/IIIa Inhibitors in Prevention and Rescue Treatment of Thromboembolic Complications During

Endovascular Embolization of Intracranial Aneurysms." This artwork demonstrates the primary sites of platelet adhesion and aggregation, and currently available inhibitors of platelet aggregation. The interaction between von Willebrand factor and glycoprotein (GP) Ib-IIIa is the focal point of platelet adhesion. Following initial activation, GP IIb/IIIa undergoes a conformational change at the platelet surface, rendering it active. Fibrinogen can then bind the active epitope of GP IIb/IIIa, resulting in platelet cross-linking and aggregation. Dynamic pathways that help activate and aggregate platelets include thromboxane A₂, which binds the TP- α receptor on the platelet surface, and adenosine diphosphate (ADP), which binds to the P2Y₁₂ platelet receptor. Read more on p. 268.



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NEURORADIOLOGY REVIEW SERIES

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EDITOR'S CHOICE

Head and Neck: Skull Base Imaging

Patricia A. Hudgins, Kristen L. Baugnon

There is a myriad of head and neck pathologies that extend from the extracranial to the intracranial compartment, traversing the skull base, and knowledge of the imaging appearance of this pathology is critical to practicing neurosurgeons. This article will review some of the important inflammatory or acquired head and neck pathology along the skull base, neoplastic skull base lesions, and the intracranial extension of head and neck malignancy. Focus will be on the relevant anatomy, appropriate imaging protocols to evaluate these processes, as well as the differentiating imaging findings on CT and MRI.

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