BOOKS RECEIVED

An Introduction to Behavior Genetics. 2008. By Terence J. Bazzett. Published by Sinauer Associates, Inc. 476 pages. C$120 approx.

Surgical Management of Low Back Pain. Second Edition. 2008. By Daniel K. Resnick, Regis W. Haid Jr., Jeffrey C. Wang. Published by Thieme. 232 pages. C$159 approx.

Neurotrauma and Critical Care of the Spine. 2008. By Jack Jallo, Alexander R. Vaccaro. Published by Thieme. 256 pages. C$185 approx.

Modern Management of Acoustic Neuroma Progress in Neurological Surgery. Volume 21. 2008. Edited by Jean Régis, Pierre-Hugues Roche. Published by Karger. 262 pages. C$230 approx.

Dissection of the Human Brain. 2008. By Lennart Heimer. Published by Sinauer Associates, Inc. DVD. C$90 approx.

An Illustrated Handbook of Flap-Raising Techniques. 2008. By Kartik G. Krishnan. Published by Thieme. 119 pages. C$159 approx.

Comprehensive Review of Headache Medicine. 2008. Edited by Morris Levin. Published by Oxford University Press. 322 pages. C$45 approx.

The Collectors of Lost Souls Turning Kuru Scientists into Whitemen. 2008. By Warwick Anderson. Published by The Johns Hopkins University Press. 318 pages. C$30 approx.

Sensation & Perception. Second Edition. 2009. By Jeremy M. Wolfe, Keith R. Kluender, Dennis M. Levi, Linda M. Bartoshuk, Rachel S. Herz, Roberta L. Klatzky, Susan J. Lederman, Daniel M. Merfeld. Published by Sinauer Associates, Inc. 460 pages. C$130 approx.

BOOKS REVIEWED

Cerebral Vasospasm: New Strategies in Research and Treatment. 2008. Edited by Talat Kiris, John H. Zhang. Published by Springer Wien New York. 463 pages. Price C$290.

Cerebral vasospasm is a prolonged, sometimes severe, but ultimately reversible narrowing of cerebral arteries that begins days after subarachnoid hemorrhage (SAH). The risk of vasospasm depends mainly on the thickness of blood clots in the subarachnoid space and ventricles. Bleeding significant enough to cause vasospasm is usually due to rupture of a saccular aneurysm, but vasopasm can complicate traumatic SAH, and rarely vascular malformations or brain tumours that bleed heavily into the subarachnoid space at the base of the brain.

Vasospasm begins several days following SAH and peaks in severity about a week later, and progression to symptoms of cerebral ischemia depends on a number of factors but most importantly the degree and distribution of arterial narrowing. Vasospasm affects only intradural arteries and primarily, but not exclusively, the arteries and arterioles located outside the brain. The pathogenesis of vasospasm is clearly due to the encasement of cerebral arteries by blood clots, but the complex extra- and intracellular responses to the contact between arterial wall and hematoma are still be explored and defined. At the present time endothelial injury is one hot focus of attention, resulting in increased production of the powerful vasoconstrictor endothelin-1 (ET-1), and/or reduced production of the vasodilator nitric oxide (NO). An imbalance in vessel wall effect to these two endogenous and endothelium-derived factors is a leading theory in the pathogenesis of vasopasm.

Over the past several decades there have been significant improvements in our ability to manage vasospasm, resulting in an important decline in morbidity and mortality among SAH patients. Avoiding hypovolemia, ensuring adequate blood pressures, use of cerebroprotectants such as nimodipine, and prompt intervention with endovascular treatment such as balloon angioplasty for symptomatic vasospasm is the most important goal of SAH management. Determining the exact pathogenesis of this condition and a corresponding single pharmacological prevention remain ongoing pursuits of neurosurgical research.

Which is where this book "Cerebral Vasospasm: New Strategies in Research and Treatment", might have come in. This text amounts to a collection of short papers presented at the 9th International Conference on Cerebral Vasospasm that was held in Instanbul, Turkey in the spring of 2006. They are assembled roughly according to subject ("pathogenesis", "biochemistry", "electrophysiology",