

Indian Journal of Neurosurgery



Editor

Anita Jagetia

Department of Neurosurgery,
G.B. Pant Institute of Medical Education
and Research
New Delhi, India

Senior Advisory Members and Past Editor-in-Chief

A. K. Mahapatra

Department of Neurosurgery,
VC SOA Deemed to be University,
Bhubaneswar, India

Raj Kumar

Department of Neurosurgery,
Sanjay Gandhi Post Graduate Institute,
Lucknow, India

Assistant Editor

Sharad Pandey

Department of Neurosurgery, ABVIMS &
Dr RML Hospital, New Delhi, India

Shweta Kedia

Department of Neurosurgery, AIIMS, Delhi,
India

Shaam Bodeliwala

Department of Neurosurgery, GIPMER,
Delhi, India

Medical Statistics

Krishna V.

Department of Ophthalmology, Moolchand
Hospital, Delhi, India

Editorial Board

Abrar Ahad Wani

Department of Neurosurgery, SKIMS,
Srinagar, India

Altaf Umar Ramzan

Department of Neurosurgery, SKIMS,
Srinagar, India

Ashish Suri

Department of Neurosurgery, AIIMS,
Delhi

B. Ravi Mohan Rao

Department of Neurosurgery, Vikram
Hospital, Bengaluru, India

Col. (Dr) Manish Sharma

Department of Neurosurgery,
R&R Hospital, Delhi, India

Daljit Singh

Department of Neurosurgery, GIPMER,
New Delhi, India

Jitin Bajaj

Department of Neurosurgery,
NSCB Medical College and Superspeciality
Hospital, Jabalpur, India

Jutty Partiban

Department of Neurosurgery, Kovai
Medical Center Hospital, Coimbatore, India

Krishna Kumar

Department of Neurosurgery, SCTIMST,
Trivandrum, India

Manas Panigrahi

Department of Neurosurgery, KIMS,
Hyderabad, India

Manish Jaiswal

Department of Neurosurgery, KGMC,
Lucknow, India

Monica Tandon

Neuroanesthesia, Department of
Anesthesia and Intensive Care GIPMER,
Delhi, India

Pravin Salunke

Department of Neurosurgery, PGI,
Chandigarh, India

Rabi Narayan Sahu

Department of Neurosurgery, AIIMS,
Bhubaneswar, India

Rajneesh Kumar

Department of Neurosurgery, AIIMS,
Rishikesh, India

Tariq Mateen

Department of Intervention Radiology,
Narayana Hirdulaya, New Delhi, India

Vivek Gupta

Department of Radiodiagnosis,
Fortis Hospital Mohali, India

National Advisory Board

Ashish K. Chand

Department of Neurosurgery,
St. John Medical College,
Bengaluru, India

M. K. Tewari

Department of Neurosurgery, PGI,
Chandigarh, India

International Advisory Board

Aaron Mohanty

Department of Neurosurgery,
University of Texas, Texas, USA

Ashwini Sharan

Department of Neurosurgery,
Thomas Jefferson University,
Philadelphia, USA

Debora Garozza

Department of Neurosurgery, Neuro Spinal
Hospital, United Arab Emirates

Dheerendra Prasad

Department of Neurosurgery,
Roswell Park Cancer Institute & University,
Buffalo, USA

Gazanfar Rahmathulla

Department of Neurosurgery,
UF College of Medicine, Jacksonville,
Florida, USA

George Jallo

Department of Neurosurgery,
Johns Hopkins University, Baltimore, USA

Guoming Luan

Department of Neurosurgery, Beijing
Sanbo Brain Hospital, Capital Medical
University, Beijing, China

Hossam Elnoamany

Department of Neurosurgery,
Menoufia University, Egypt

James A. Balogun

Department Of Neurosurgery, University
College Hospital Ibadan, Nigeria

Mehmet Zeleili

Department of Neurosurgery,
Izmir, Turkey

Michael Karsy

Department Of Neurosurgery
University Of Utah ,USA

Najja El Abbadi

Head of the Department of Neurosurgery,
Cheikh Zaid International University
Hospital, Morocco

Nelci Zanon

Department of Neurosurgery,
Pediatric Neurosurgical Centre,
Sao Paolo, Brazil

Olexander Voznag

Department of Neurosurgery,
Fenofia University, Ukraine

Partha S. Ray

Department of Neurology,
Walton Centre, Liverpool
United Kingdom

Rokuya Tanikawa

Director of the Stroke Center at Teishinkai
Hospital in Sapporo, Japan

Sarah Olson

Neurosurgeon In Brisbane, Australia

Shoichi Ishihara

Department of Neurosurgery, Saitama
International Medical Center, Saitama,
Japan

Sunil Manjila

Department of Neurosurgery,
Michigan, USA

Tatsuya Tanaka

Department of Neurosurgery, Asahikawa
Medical College, Hokkaido, Japan

Scientific Paper Assessment Board

Krishnakumar Kesavapisharady

Department of Neurosurgery,
SCTIMST (An institute of National
Importance under Govt of India),
Trivandrum, Kerala, India

Dhaval Shukla

Department of Neurosurgery,
NIMHANS, Bangalore, India

© 2023. The Author(s). All rights, including the rights of publication, distribution, and sales, as well as the right to translation, are reserved. No part of this work covered by the copyrights hereon may be reproduced or copied in any form or by any means – graphic, electronic, or mechanical, including photocopying, recording, taping, or information and retrieval systems - without written permission of the publisher.

Indian Journal of Neurosurgery is published 3 times a year in March, August, and December by Thieme Medical and Scientific Publishers Private Limited, A - 12, Second Floor, Sector - 2, Noida - 201301, Uttar Pradesh, India. Tel: +91-120- 4556600, Fax: +91-120-455-6649.

Subscription: Open access journals available online for free at <http://open.thieme.com>.

The Indian Journal of Neurosurgery is indexed in the Directory of Open

Access Journals (DOAJ), Emerging Sources Citation Index (ESCI), Embase, EBSCO, and ProQuest.

Advertisers contact: Marketing, Thieme Publishers Delhi, A-12, Second Floor, Sector -2, Noida-201301, Uttar Pradesh, marketing@thieme.in.

Editorial comments should be sent to journals@thieme.com. The content of this journal is available online at www.thieme-connect.com/Products. Visit our Web site at www.thieme.com and the direct link to this journal at www.thieme.com/ijns.

Typesetting: DiTech Process Solutions Pvt. Ltd. Mumbai, India

Printing and Binding: Saurabh Printers Pvt. Ltd.

Printed in India