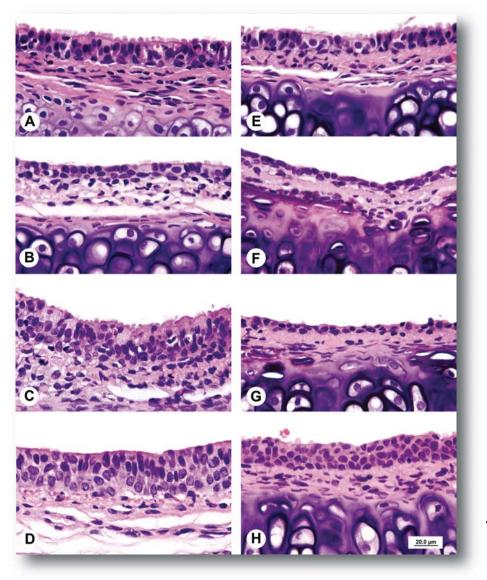
JSTP Journal of TOXICOLOGIC PATHOLOGY

http://www.japantoxpath.org/en/publication/jtp/



Vol. 25 No. 3 Autumn 2012

Published by The Japanese Society of Toxicologic Pathology

The Journal of Toxicologic Pathology has been selected for coverage in Thomson Reuters products and services. Beginning with volume 21, number 1, year 2008, the journal is indexed and abstracted in:

- Science Citation Index Expanded (also known as SciSearch[®])
- ◆ Journal Citation Reports/Science Edition
- ♦ Biological Abstracts
- ♦ BIOSIS Previews

Editor-in-Chief	Dai Nakae, Tokyo
Editor Emeritus	Eisei Ishikawa (1988–1997)
Former Editors-in-Chief	Kunio Doi (1998–2003) Kunitoshi Mitsumori (2003–2007)

Editorial Board (Editors), Editors in Foreign Countries Underlined

Wijit Banlunara, Bangkok	Robert R. Maronpot, North Carolina	Masami Suzuki, Shizuoka
Satoshi Furukawa, Saitama	Hirofumi Nagai, Kanagawa	James Swenberg, North Carolina
Paul-Georg Germann, Barsbütel	Kumiko Ogawa, Tokyo	Kazutoshi Tamura, Shizuoka
Shim-mo Hayashi, Osaka	Yuji Oishi, Osaka	Leander Tryphonas, Ontario
Satoru Hosokawa, Ibaraki	Yoshimasa Okazaki, Itingen	Tetsuya Tsukamoto, Aichi
Mari Iida, Wisconsin	Kiyokazu Ozaki, Osaka	Masahiro Tsutsumi, Nara
Katsumi Imaida, Kagawa	Jae-Hak Park, Seoul	Klaus Weber, Itingen
Keisuke Izumi, Tokushima	Jin Ren, Shanghai	Jihong Yang, Yunnan
<u>Hijiri Iwata, Itingen</u>	Hiroshi Satoh, Tokyo	Midori Yoshida, Tokyo
<u>Takahito Kambara, Pennsylvania</u>	John Curtis Seely, North Carolina	Naomi Yoshimi, Okinawa
Jong-Koo Kang, Cheongju	Makoto Shibutani, Tokyo	Katsuhiko Yoshizawa, Osaka
Osamu Katsuda, Nara	Kazumoto Shibuya, Tokyo	
Wolfgang Kaufmann, Ludwigshafen	Mariko Shirota, Kanagawa	

Description

The *Journal of Toxicologic Pathology* is an official periodical journal of the Japanese Society of Toxicologic Pathology. The journal accepts original papers, short communications, case reports and review articles. One volume published each year is composed of four numbers. Members of the Society are entitled to receive all publications in exchange for his or her membership fee. All articles published in the Journal of Toxicologic Pathology represent the opinion(s) of the authors(s) and should not be construed to reflect the opinion of the Society.

The *Journal of Toxicologic Pathology* has been selected for coverage in Thomson Reuters products and services. Beginning with volume 21, number 1, year 2008, the journal is indexed and abstracted in:

- ◆ Science Citation Index Expanded (also known as SciSearch[®])
- ◆ Journal Citation Reports/Science Edition
- Biological Abstracts
- BIOSIS Previews

Mailing address: Dai Nakae, M.D., Ph.D., Editor-in-Chief

Editorial Office, Journal of Toxicologic Pathology, c/o Publication Center, IPEC, Inc., 1-24-12 Sugamo, Toshima, Tokyo 170-0002, Japan

Journal of Toxicologic Pathology homepage: http://www.japantoxpath.org/en/publication/jtp/

Free access to full papers of

Whole issue: https://www.jstage.jst.go.jp/browse/tox/

Vol. 22 (2009) to present: http://www.ncbi.nlm.nih.gov/pmc/journals/1592/

Notice for photocopying

If you wish to photocopy any work of this publication, you have to get permission from the following organization to which licensing of copyright clearance is delegated by the copyright owner.

<All users except those in USA> Japan Academic Association for Copyright Clearance, Inc. (JAACC) 6-41 Akasaka 9-chome, Minato-ku, Tokyo 107-0052, Japan Phone 81-3-3475-5618 FAX 81-3-3475-5619 E-mail: info@jaacc.jp

1 none 81-5-5475-5018 TAX 81-5-5475-5019 E-man. nno@jaace.jp

<Users in USA> Copyright Clearance Center, Inc., 222 Rosewood Drive, Danvers, MA 01923, USA

Phone 1-978-750-8400 FAX 1-978-646-8600

Online ISSN 1881-915X

Cover: A. Control male. Tracheal mucosa is 2 to 3 cell layers thick with luminal lining comprised of columnar ciliated epithelial cells and Clara cells with dome-shaped apical surfaces. B. Male exposed to cigarette mainstream smoke at 75 mg total particulate matter (TPM)/m³. Attenuated tracheal mucosa lined by a single layer of cuboidal epithelial cells with shortening and loss of cilia. C. Male exposed to 200 mg TPM/m³. Thickened tracheal mucosa comprised of multiple layers of hyperplastic epithelial cells with decreased ciliated cells and cytoplasmic vacuolation of surface epithelial cells. D. Male exposed to 400 mg TPM/m³. Hyperplastic mucosal epithelial layer consisting of 3 to 4 cell layers with early organization of luminal epithelial cells. E. Control female. Tracheal mucosa is 2 to 3 cells layers thick with luminal lining comprised of tall cuboidal ciliated cells and Clara cells with dome-shaped apices. F. Female exposed to 75 mg TPM/m³. Attenuated tracheal mucosa lined by a single layer of flattened epithelial cells. G. Female exposed to 200 mg TPM/m³. Markedly attenuated tracheal mucosal surface lined by a single layer of flattened epithelial cells. H. Female exposed to 400 mg TPM/m³. Hyperplastic tracheal mucosa lined by a single layer of poorly differentiated epithelial cells. H. Female exposed to 400 mg TPM/m³. Hyperplastic tracheal mucosa lined by a single layer of poorly differentiated epithelial cells. H. Female exposed to 400 mg TPM/m³. Hyperplastic tracheal mucosa lined by 4 layers of poorly differentiated epithelial cells. G. Scale bar applies to all figures (See , CA Carter *et al.* p. 201–207).