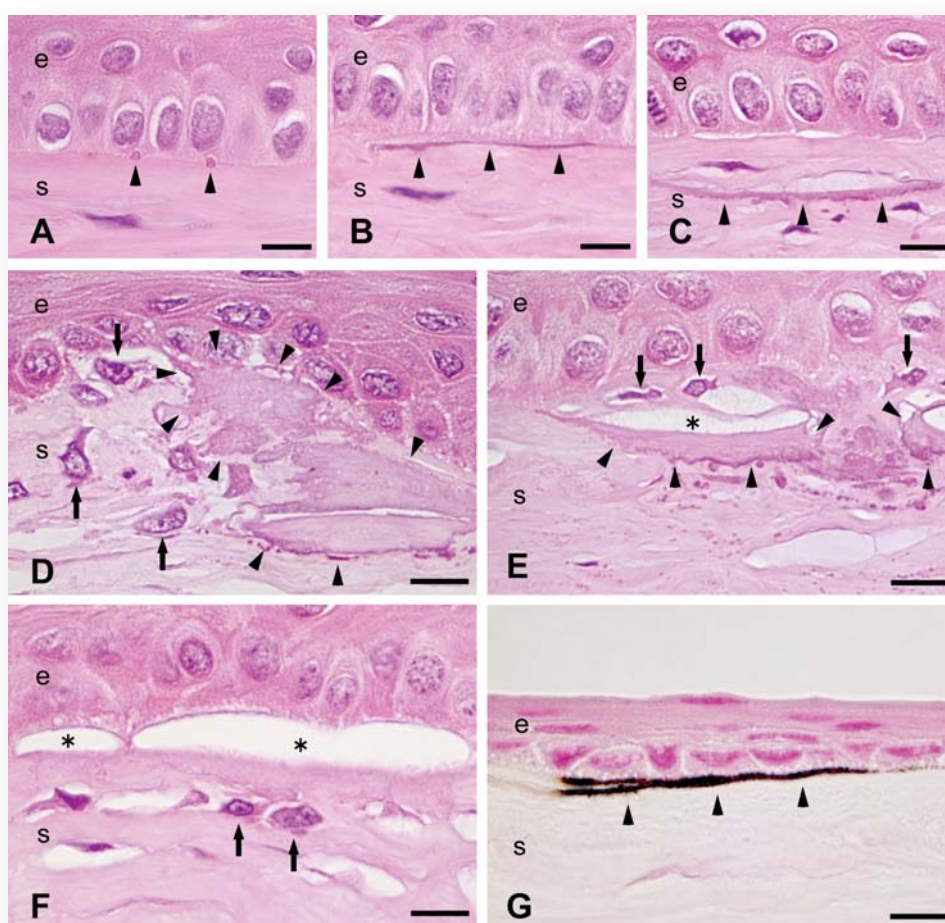




*Journal of*  
**TOXICOLOGIC  
 PATHOLOGY**

<http://www.japantopath.org/en/publication/jtp/>



*Vol. 26  
 No. 3  
 Autumn  
 2013*

**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

### 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 author(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:** Masami Suzuki, D.V.M., 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](mailto:info@jaacc.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:** Cornea with various forms of mineralization in Wistar Hannover rats. A, B, C: Granular (A) and linear (B, C) deposits (arrowheads) in 32-week-old male Crl rats. HE. They occurred along the basement membrane of the corneal epithelium, on the anterior edge of the corneal stroma (A, B) or within the stroma at some distance away from the edge (C). D, E: Coarse deposits (arrowheads) in 32-week-old male Rcc rats. HE. Near the deposits, some activated keratocytes with round to oval nuclei and prominent nucleoli can be observed (arrows). Among these, three keratocytes between the corneal epithelium and deposits can be observed (E, arrows). Near the deposits or activated keratocytes, there is occasionally a distinct cleft below the corneal epithelium (E, asterisk). F: Two activated keratocytes (arrows) and clefts (asterisks) without any visible mineral deposits in a 10-week-old male Rcc rat. HE. G: Linear deposit (arrowheads) in a 110-week-old female Rcc rat. Von Kossa's method. The deposit is positive for calcium. e, corneal epithelium; s, corneal stroma. Bar = 10  $\mu$ m. (See, S Hashimoto, et al. p. 275–281)