

Advertising Disclaimer

Your membership matters.
Continue to help lead the fight against kidney disease. Renew today.
www.asn-online.org/membership



[HOME](#) | [CURRENT ISSUE](#) | [ADVERTISE](#) | [SUBSCRIBE](#) | [ARCHIVES](#) | [FEEDBACK](#) | [ALERTS](#) | [RSS](#) | [CLASSIFIEDS](#) | [HELP](#)

User Name

Password

LOG-IN



Advanced Search

AKI Associated with Synthetic Cannabinoids: A Case Series



Gautam Kantilal Bhanushali^{*,†}, Gaurav Jain^{*,†}, Huma Fatima[‡], Leah J. Leisch[†], Denyse Thornley-Brown^{*,†}

[+ Author Affiliations](#)

Correspondence:
Dr. Denyse Thornley-Brown, Division of Nephrology, Department of Internal Medicine, University of Alabama, PAUL 234, 1720 2nd Avenue South, Birmingham, AL 35294-0007. Email: dtb@uab.edu

Summary

SPICE, or K2, encompasses preparations of synthetic cannabinoids marketed as incense products, bath additives, and air fresheners and used for recreational purposes. These preparations are usually smoked for their cannabis-like effects and do not appear on routine urine toxicology screens. We report four cases of oliguric AKI associated with SPICE use in previously healthy men. All showed improvement in renal function without need for renal replacement therapy. Renal biopsy, performed in three of the patients, revealed acute tubular necrosis. The close temporal and geographic associations between the clinical presentation and the development of AKI strongly suggest an association between these SPICE preparations and AKI. Further investigations are required to identify the potential nephrotoxic agent(s). Nephrotoxicity from designer drugs should be included in the differential diagnosis of AKI, especially in young adults with negative urine drug screens.

Received June 4, 2012.
Accepted October 31, 2012.

Copyright © 2013 by the American Society of Nephrology

This Article

Published online before print
December 2012, doi:
10.2215/CJN.05690612
CJASN December 2012
CJN.05690612

» Abstract

[Full Text](#)

[Full Text \(PDF\)](#)

[- Classifications](#)

Original Article

[- Services](#)

Email this article to a colleague
Alert me when this article is cited
Alert me if a correction is posted
Similar articles in this journal
Similar articles in PubMed
Download to citation manager
[© Get Permissions](#)

[+ Google Scholar](#)

[+ PubMed](#)

Current Issue

March 07, 2013, 8 (3)



Alert me to new issues of CJASN

[IMPACT FACTOR](#)

[ABOUT THE JOURNAL](#)

[ONLINE SUBMISSION](#)

[AUTHOR RESOURCES](#)

[EDITORIAL BOARD](#)

[REPRINTS/PERMISSIONS](#)

[MOST READ](#)

[MOST CITED](#)

[KidneyNews](#)

[NephSAP](#)

[JASN](#)

Advertising Disclaimer

Be a part of something innovative, influential and dynamic.
Be a part of ASN.



ASN members enjoy discounts on ASN's educational programs, subscriptions to ASN's publications, and more.

Join or renew today at www.asn-online.org/membership

