American College of Medical Toxicology
2015 Annual Scientific Meeting
Research Abstract Submission Instructions

Instructions:

1. Length limits:
   a. Title: 20 words.
   b. Abstract: 350 words
      i. Including section labels (Background, Research question, Methods, etc.)
      ii. Not including authors or author affiliations.
   c. Author affiliations: Up to 2 per author

2. Deadline:
   a. Submissions will be accepted until 11:59 pm Eastern Standard Time, November 17, 2014. Late submissions cannot be accepted.

3. How to submit:
   a. Submit your abstract using the ACMT online Research Abstract Submission Form
      i. All items are required.
   b. Abstract review and author notification will be conducted on a rolling basis.
      i. All authors will receive a decision about acceptance by mid-December.
   c. All communications will be made by email.
   d. If you have questions, please contact ASMresearch@acmt.net.

4. Type of Research:
   a. The ACMT Annual Scientific Meeting welcomes all types of original research of interest to medical toxicologists and their patients.
   b. For review purposes, please classify your study as one of the following:
      i. Research studies
      ii. Case reports
         1. The definition of a case report is a study involving fewer than three patients with a similar condition, presentation, or clinical feature and that does not involve an \textit{a priori} planned novel medical / scientific intervention.
      iii. When in doubt, inquire at ASMresearch@acmt.net.

5. Encore presentation of research studies:
   a. Toxicology research is presented at numerous educational/scientific gatherings each year. In an effort to provide ACMT ASM participants with access to the best available new research, the ACMT ASM supports “encore presentation” of research that has been presented at other scientific meetings, subject to the following policies:
      i. All prior presentation must be disclosed at the time of abstract submission (see examples)
1. This includes prior presentation of partial / preliminary results.

ii. Prior presentation concerns presentation at a national or international meeting.
   1. Presentation at local or regional meetings does not constitute prior presentation.

iii. Studies presented on/before March 31, 2014 are not eligible for encore presentation at ACMT ASM 2015

iv. Research studies presented (or scheduled for presentation) between March 31, 2014 and March 28, 2015 are eligible for encore presentation
   1. Case reports are not eligible for encore presentation

b. When in doubt, inquire at ASMresearch@acmt.net.

6. Prior publication:
   a. Studies that have been (or are scheduled to be) fully published (manuscript form) prior to March 28, 2015 are not eligible for presentation at ACMT ASM
   b. Research that has been published in abstract form only is eligible for presentation.
      i. For copyright reasons, previously published abstracts will be acknowledged in the Journal of Medical Toxicology with the abstract reference, but cannot be republished.
   c. When in doubt, inquire at ASMresearch@acmt.net.

7. Style:
   a. Structure: All original research and previously published original research abstracts should contain the following sections, underlined in the text:
      i. **Background**: 1 – 2 sentences explaining why the research is needed.
      ii. **Hypothesis or Research question**: 1 sentence.
          1. Optional (but encouraged) for case reports
      iii. **Methods**: Succinctly describe your study methods:
          1. Begin with a statement of your research type (e.g. this is a randomized clinical trial; this is a consecutive-patient case series; this is a convenience sample survey; this is a case report).
          2. Include setting/data source, method of obtaining data, and statistical analyses used.
          3. Even a case report should have basic methods! See example #2.
      iv. **Results**: Present your key results.
          1. Statements such as “results will be presented at the meeting” are not acceptable.
      v. **Discussion**:
          1. 1 – 3 sentences, very succinctly explaining the significance of your results.
          2. Where appropriate, state study limits here.
          3. Do not present results in the discussion section, and avoid making statements in the discussion section that do not flow directly from your data.
vi. Conclusion: 1 sentence.

vii. Do not start a new paragraph with each section (see examples)

b. Statistics: Whenever appropriate, present the measure of central tendency followed by a description of certainty.
   i. For parametric data, this is usually presented as measured result and 95% confidence interval (e.g. 150 mmHg (95% CI: 135 – 165 mmHg)).
   ii. For non-parametric data, this is usually presented as median and either range or 25th/75th percentile (e.g. median: 150 mmHg (IQR: 130 – 175 mmHg)).
   iii. For comparative tests:
       1. If the difference is statistically significant, at a minimum please present P value and test used (e.g. “mean pressure was 150 mmHg in the intervention group and 190 mmHg in the control group (P = 0.02, Chi-square)."
       2. If the difference is not statistically significant, do not present the P value (e.g. “mean pressure was 150 mmHg in the intervention group and 155 mmHg in the control group (P = NS, Chi-square))."
       3. It is strongly preferred to also present an estimate of the absolute difference (e.g. mean pressure was 150 mmHg in the intervention group and 190 mmHg in the control group (95% CI for difference: 25 – 55 mmHg; P = 0.02, Chi-square))."

   c. Abbreviations and units of measure:
      i. Please minimize the use of unfamiliar abbreviations.
      ii. The first time an abbreviation is used, define it (e.g. 400 least publishable units (LPUs)).
         1. It is not necessary to define common, units of measure (cm; mmHg) or other very common abbreviations (US; PC; IQR).
      iii. We strongly encourage you to include SI units with all measurements (e.g. 12 inches (31.1 cm)).

d. Tables and figures:
   i. One small data table is permitted.
      1. Maximum table size is 8 columns and 10 rows.
      2. Do not use shading.
      3. Headings and first column labels should be in bold.
      4. The table does not count toward word limit
      5. The data table can only contain numeric data. Tables composed of 100% text will not be accepted.
   ii. Graphs, photographs, maps, and other figures are not permitted.

e. Proprietary names: Do not use proprietary (trade) names of any product unless necessary to convey specific information. Use standard/recognized generic names.

f. References: Do not include references in your abstract. It is appropriate to provide references in an eventual poster or platform presentation.
8. Authors:
   a. All submissions must conform to the Internal Committee of Medical Journal Editors Authorship and Contributorship requirements, available here: http://www.icmje.org/ethical_1author.html.
   b. Author names should be listed as last name and initials, separated by commas (e.g. Rumack BH, Goldfrank LR)
   c. There is no limit to the number of authors
   d. A maximum of 2 affiliations per author are permitted.
      i. Include: Institution, City, US State or Country (e.g. University of Sorghum, Smallville, NE)
      ii. Do not include department or division.

9. Funding support:
   a. All funding support must be disclosed.

10. Selection process and criteria:
    a. All eligible abstracts will be stripped of identifying information and undergo blinded peer review by at least three members of the ACMT research committee
       i. Reviewers will be required to disclose conflicts of interest and recuse themselves from review of any abstract involving a personal, professional, or financial conflict
    b. Selection will be based on overall score
    c. Selection for platform presentation will be based on overall score
       i. Encore presentations are be eligible for platform presentation, with the limitation that research that was presented as a platform at a previous meeting geared primarily toward medical toxicologists will generally not be eligible for platform presentation at ACMT ASM.

11. The Research Committee will recognize one platform as Best Presentation

Thank you for choosing to submit your work to the 2015 ACMT Annual Scientific Meeting!

V.9.29.14
### Title
Does Acetaminophen Poisoning Increase Risk of Allergy to Cats?

### Corresponding author name
Bruce Lee

### Email address for all correspondence
karateguy@hongkong.net

### Type of Research *(Research Study or Case Report)*
Research Study

### First Author *(e.g. Rumack BH)*
Lee BJ

### First Author affiliations *(e.g. University of Maine, Portland, ME)*
University of San Francisco, San Francisco, CA

### Second Author
Davidson H

### Second Author affiliations
University of Northern South Dakota, Sturgiss, SD

### Third Author
n/a

### Are there more than six authors? *(If so, write “yes” and attach a complete author list)*
No

### Word Count *(abstract only)*
245

### Has this work been previously presented?
Yes

### List all previous presentations of this work, including abstracts

### Will this work be published in manuscript form before March 27, 2015? *(Yes or No)*
No

### List all funding sources for this work
Internally funded

### What IRB/IACUC approved this study *(If Exempt, write “Exempt”)*
UCSF IACUC approved

### “I certify that this work conforms to the ICMJE Authorship and Contributorship requirements”
Yes
Title: Does Acetaminophen Poisoning Increase Risk of Allergy to Cats?

Abstract text:

**Background:** Epidemiologic studies have reported an association between acetaminophen use and allergy/atopy. Allergy to house cats (*F. catus*) is a common medical condition. It is not known whether exposure to acetaminophen in overdose increases the risk of subsequently developing house cat allergy.

**Research question:** Are acetaminophen overdose patients at increased risk of developing allergy to house cats? **Methods:** This is a retrospective study of consecutive patients presenting to a tertiary care hospital, and age/sex-matched controls. A search of our hospital’s electronic medical record system (1992 – September 1, 2011) was used to identify all patients discharged alive following hospital admission for acetaminophen overdose. Each case was age- and sex-matched 2:1 to control patients admitted for an overdose to a non-acetaminophen pharmaceutical product. An event was defined as any inpatient or outpatient encounter containing an ICD-9 code-family notation for asthma or allergic conditions and the word, “cat,” in the provider notes field. Subjects were censored 24 months after their last encounter in our system. Cox proportional hazards analysis was used to evaluate time-to-event. **Results:** A total of 84 patients admitted for acetaminophen overdosage were matched to 142 controls. During a median of 16 months of follow-up, 17 acetaminophen overdose patients and 12 controls developed cat allergy (HR: 2.5; 95% CI: 1.2 – 6.8; P = 0.02, Cox PH) **Discussion:** Our analysis was unable to control for prior or subsequent acetaminophen use. **Conclusion:** Patients who overdose on acetaminophen may be at increased risk of subsequent developing house cat allergy.
<table>
<thead>
<tr>
<th>Title</th>
<th>Neutoprolol Extraction During High-Flux Hemodialysis</th>
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<tbody>
<tr>
<td>Corresponding author name</td>
<td>Bruce Wayne</td>
</tr>
<tr>
<td>Email address for all correspondence</td>
<td><a href="mailto:imbatman@gotham.edu">imbatman@gotham.edu</a></td>
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<tr>
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<td>Case report</td>
</tr>
<tr>
<td>First Author (e.g. Rumack BH)</td>
<td>Wayne B</td>
</tr>
<tr>
<td>First Author affiliations (e.g. University of Maine, Portland, ME)</td>
<td>Gotham Technical University, Gotham City, NY</td>
</tr>
<tr>
<td>Second Author</td>
<td>Grayson R</td>
</tr>
<tr>
<td>Second Author affiliations</td>
<td>Gotham Technical University, Gotham City, NY</td>
</tr>
<tr>
<td>Third Author</td>
<td>Pennyworth A</td>
</tr>
<tr>
<td>Third Author affiliations</td>
<td>University of the Virgin Islands, Charlotte Amilie, USVI</td>
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# Title

Neutoprolol Extraction During High-Flux Hemodialysis

## Abstract text

**Background:** Neutoprolol is a new beta-receptor antagonist that produces life-threatening toxicity in overdose. It is not previously known whether neutoprolol is removed by hemodialysis. **Hypothesis:** High-flux hemodialysis increases clearance of neutoprolol compared with native elimination alone. **Methods:** This is a single patient chart review. A 42 year old woman with a history of hypertension ingested 28,000 mg of neutoprolol in a suicide attempt. Hypotension and bradycardia were refractory to therapy with glucagon, norepinephrine, and high dose insulin. High flux hemodialysis was initiated 7.2 hours after ingestion. Timing serum neutoprolol levels were obtained before, during, and after hemodialysis as part of routine clinical care. In addition, inlet and outlet neutoprolol levels were obtained from the dialysis circuit. Dialysis was performed using a Frensius 2008K machine and a Markum 6000 cellulose triacetate membrane. Pharmacokinetic calculations were made using SummitPK. **Results:** Three pre-dialysis, four intra-dialysis, and two post-dialysis serum neutoprolol measurements were obtained. All demonstrated first-order elimination kinetics. The serum half-life of neutoprolol was 8.4 hours pre-dialysis, 1.2 hours during dialysis, and 7.2 hours post-dialysis. Dialysis clearance of neutoprolol was 65 mL/min. At a time when the serum neutoprolol level was 78.5 mcg/mL, dialysis extraction of neutoprolol was 15.7 mg/min. Following 6 hours of dialysis, the patient was weaned from vasopressor support. She recovered fully and was transferred to psychiatry on 4 days after ingestion. **Discussion:** Although this study shows that dialysis increases neutoprolol elimination, whether this translates to clinical benefit is unproven. Because protein binding of neutoprolol is inversely related to serum levels, these results may not apply to the chronic care setting. **Conclusion:** High flux hemodialysis effectively removes neutoprolol under overdose conditions.
# EXAMPLE 3 (Case Report)

<table>
<thead>
<tr>
<th>Title</th>
<th>Laszlonium Ingestion with Serum Levels</th>
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<tbody>
<tr>
<td>Corresponding author name</td>
<td>Miguel Phelps</td>
</tr>
<tr>
<td>Email address for all correspondence</td>
<td>mphelps@ACMT generalhospital.org</td>
</tr>
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<tr>
<td>First Author <em>(e.g. Rumack BH)</em></td>
<td>Phelps M</td>
</tr>
<tr>
<td>First Author affiliations <em>(e.g. University of Maine, Portland, ME)</em></td>
<td>ACMT General Hospital, Phoenix, AZ</td>
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<tr>
<td>Second Author</td>
<td>Gaanes R</td>
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<tr>
<td>Second Author affiliations</td>
<td>ACMT General Hospital, Phoenix, AZ</td>
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<td>Exempt</td>
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“I certify that this work conforms to the ICMJE Authorship and Contributorship requirements” | Yes |
Title: Laszlomonium Ingestion with Serum Levels

Abstract text: Background: Laszlomonium is a novel therapy with FDA indications to prevent hydrophobia. There is no experience with overdose of this drug. Hypothesis: We hypothesize that symptoms following acute overdose should correlate with serum levels. Methods: This is a single patient chart review. A 76 year old male with a history of dementia and diabetes accidentally ingested 5,000 mg of his son’s laszlomonium. Within two hours, he developed repeated episodes of vomiting, myoclonic jerking, and then coma. Naloxone and flumazenil were administered without effect. The patient was intubated and mechanically ventilated. The coma persisted for 48 hours at which point he rapidly awoke. Serum was obtained every 12 hr and laszlomonium levels were determined via GC-mass spectroscopy using methylated-laszlomonium as a standard. Results: Levels appear in the table. Discussion: This case of acute ingestion presented with unexpected findings of myoclonus and prolonged coma. Laszlomonium is reportedly metabolized via mixed hepatic oxidase enzymes, has a therapeutic serum range of 10-15 mg/L, and has a elimination T1/2 of 6 hr. The pattern of serum levels suggests enzyme saturation. Levels correlated with duration of coma. Conclusion: Coma may occur following laszlomonium ingestion and drug levels correlated with duration of symptoms.

Table: Laszlomonium Levels vs. Time Post-Ingestion (PI)

<table>
<thead>
<tr>
<th>Time PI</th>
<th>6 hr</th>
<th>12 hr</th>
<th>24 hr</th>
<th>36 hr</th>
<th>48 hr</th>
<th>60 hr</th>
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<tr>
<td>Level mg/L</td>
<td>28.7</td>
<td>32.0</td>
<td>29.4</td>
<td>30.5</td>
<td>16.0</td>
<td>8.0</td>
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