



TOX TALK

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FINAL PREPARATIONS UNDERWAY FOR COMBINED SOFT/CAT MEETING

1986 Meeting Highlights

Norm Wade expects more than 200 participants at the October 29 - November 1 SOFT/CAT annual meeting in Reno/Lake Tahoe. Although the final schedule is not yet available, following is a short synopsis which is subject to possible change. Be sure to pick up your registration packet for a confirmatory schedule.

The GC/MS workshop, which reached its registration limit weeks ago, is scheduled to begin at 8:30 on October 29th. The ABFT board will hold its meeting on Wednesday from noon to 5 p.m.

The SOFT/CAT annual meeting will "kick-off" with a welcoming reception in the exhibit area (Bijou Complex) Wednesday evening at 6:00 p.m. At least ten corporate sponsors are expected, and members are encouraged to remember that exhibitors help underwrite the cost of the meeting and keep your registration fee low. Be sure to pick up your registra-

tion packet for reception drink tickets.

The scientific session, including invited speakers, will begin at 9 a.m., on Thursday (October 30th). The SOFT board meeting will be held at 12:30 until 1:45 when the papers will resume in the main meeting room. Norm reports receiving "a lot of interesting abstracts." The evening will feature the traditional Hospitality Suite.

Papers will continue on Friday morning at 8:30. CAT will hold its board meeting at noon. The scientific session will resume at 1:30. The official banquet will take place that evening at 7:30 after a cash bar at 6 p.m.

A full Saturday schedule will start with the SOFT business meeting at 8:30. This is your opportunity to vote for your new SOFT officers and help shape the future of SOFT. The meeting will be followed by more presentations, round table discussions, etc.

**BALLY'S/MGM GRAND HOTEL
RENO/LAKE TAHOE
October 29- - November 1, 1986**

Special Feature: Cocaine/"Crack" see page 2

SPECIAL FEATURE: COCAINE/"CRACK"

It's in your daily newspaper, on your local TV news and national talk programs, possibly in your schools or neighborhoods, and, most likely, a part of your workload. To forensic toxicologists cocaine is not unfamiliar, but a reported increase in its use, particularly in the form of "crack," has motivated a selected review of materials published which have come across many of your desks lately.

COCAINE DEATHS IN VIRGINIA by the Virginia State Health Department (Medico-Legal Bulletin Vol. 35 No. 5, September - October 1986) examines 12 deaths due directly to cocaine and includes a history of cocaine and pharmacological information, and of particular interest:

TOXICOLOGICAL PROBLEMS

The recent increase in cocaine's availability and popularity makes it a drug of primary concern to forensic and clinical toxicology laboratories. It is important that cocaine be included in their battery of drug analyses; however, there are a number of characteristics of cocaine that make detection and interpretation of results difficult.

Cocaine is extensively and rapidly metabolized. The plasma half-life of cocaine has been reported to be approximately one hour. The parent drug disappears comparatively rapidly from circulation. At least ten different metabolites have been found in urine samples from cocaine users. Urine concentrations of cocaine itself may fall below detectable limits within 12 hours of its use. Consequently, the laboratory demonstration of recent cocaine use in living people usually requires the detection of one or more of the metabolites, many of which are highly polar and necessitates special analytical procedures. Benzoyllecgonine is considered to be the most important metabolite because 35-54% of cocaine degrades into benzoyllecgonine via metabolism and/or spontaneous hydrolysis.

Another problem in cocaine detection, determination, and interpretation, is its potential for instability during storage in biological tissues and fluids. Unlike most drugs, cocaine (and certain of its metabolites) can degrade in vitro as well as in vivo. Esterase activity and pH of the biological sample, time and temperature of storage, all influence how much, if any, of the drug survives to the completion of analysis.

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J. VALENTOUR



The route of administration, dose, idiosyncratic reaction, and time between use and sampling also contribute to variations in concentrations found in cocaine users. Likewise, the concentrations found in cocaine fatalities vary widely as is evidenced by the above table of the 12 cocaine deaths previously discussed.

NOTE: SOFT member, Dr. J. Valentour, is a co-author and will furnish a copy of the complete publication upon request.

'CRACK': WHAT IT IS AND WHAT IT DOES recently appeared in the August, 1986, Microgram published by the D.E.A. documenting the differences and similarities between crack and traditional cocaine freebasing, such as:

FREEBASE PROCESS

- Removes diluents
- Solvents used
- Danger of explosion/fire
- Powdery material produced
- End product is cocaine freebase

CRACK PROCESS

- Removes diluents
- Does not require solvents
- No danger of explosion/fire
- Hard flakey material produced
- End product is cocaine freebase

The article also describes the physical and psychic differences and symptoms. For more information, contact your local Drug Enforcement Administration office.

The August 1986 issue of DAWN BRIEFINGS notes cocaine use has increased fivefold in 10 years. This publication also cites media campaigns and materials produced by the National Institute on Drug Abuse. The DAWN system also publishes statistical data on drug use and drug-related deaths which

is utilized by numerous government and private agencies. In Dr. Valentour's article noted above, these statistics are also mentioned. For more information on DAWN data, contact Birch & Davis Associates, Inc., 8905 Fairview Road, Silver Spring, MD 20910.

The July 18, 1986, issue of THE MEDICAL LETTER describes "crack" under the following categories: formulation, addiction, toxic effects, treatment, and conclusion. The toxic effects include increased heart rate and blood pressure, possible hyperpyrexia, ventricular arrhythmias, angina pectoris and myocardial infarction. It is noted that "Some experts in this field believe that most deaths caused by cocaine are due to seizures leading to anoxia." An earlier issue of THE MEDICAL LETTER (May 25, 1984) warned of the continuing use and increasing popularity of cocaine in the United States and described its patterns of use, new routes of administration, overdose, chronic use, and psychiatric effects.

CONCLUSION: The above represent only a handful of the recent publications citing the dangers of cocaine/"crack". Although the authors may approach the situation from different aspects, there is one area in which each strongly agrees. The "conclusion" of each article was virtually the same. As noted in THE MEDICAL LETTER (July 18, 1986)

"Crack" is a widely available, relatively inexpensive, rapidly addicting form of cocaine that can readily cause lethal overdose.

Unfortunately, for forensic toxicologists, this is old news.

Special thanks to Dr. Joseph R. Monforte for providing the above materials for review.

RENO READIES FOR SOFT/CAT

Are You Ready For Reno?

For those planning to attend the 1986 SOFT Annual Meeting, meeting host Norman Wade offers the following information to help make this a personally as well as professionally rewarding meeting:

HOTEL: The MGM Grand Hotel is now officially BALLY's — most "natives" will recognize either name.

DRESS CODE: Norm encourages casual dress for temperatures usually around 50 degrees but unpredictable — we will be 5,000 feet in the mountains so be prepared for fluctuating weather conditions. A sweater instead of a suit coat will be acceptable for most events.

ENTERTAINMENT: Call Carol Channing toll free at 1-800-FOR-RENO for

special event and entertainment announcements.

AIRPORT SHUTTLE: Bali's (MGM Grand) provides complimentary transportation from the Reno/Lake Tahoe airport.

INDIRECT ACCESS: Flying to San Francisco or Sacramento? It only takes two hours to drive to Reno/Lake Tahoe from Sacramento and 4 hours from San Francisco.

LATE REGISTRATION: If you have not registered yet, please do so soon or you may register at the meeting. Pre-registration eliminates additional time at the registration table and helps the meeting host plan for sufficient seats, coffee, etc.

ANNUAL MEETING PROPOSED AGENDA

November 1, 1986

Reno/Lake Tahoe

- I. CALL TO ORDER — Kincaid
- II. APPROVAL OF AGENDA
- III. PRESIDENT'S INTRODUCTORY REMARKS
- IV. READING OF THE 1985 ANNUAL BUSINESS MEETING MINUTES — Hodnett
- V. APPROVAL OF THE 1985 ANNUAL BUSINESS MEETING MINUTES
- VI. TREASURER'S REPORT — McGee
- VII. REPORT OF THE BOARD OF DIRECTORS — Kincaid
- VIII. COMMITTEE REPORTS — McCurdy
 1. By Laws — Dubowski
 2. Toxicology Reporting — WuChen
 3. Budget and Finance — Backer
 4. Education (ERA) — Caplan
 5. Right-To-Know — Schaeffer
 6. Publications — Caplan/Stajic
 7. Environmental Toxicology:
 - A. Natural Poisons — Spiehler
 - B. Pesticides — Siek
 - C. Noxious Chemical Exposure — Rieders
 8. Audit — Valentour
 9. Driving under the influence of drugs (DUID) — Solomons
 10. Membership — Hodnett
 11. Evaluated Methods — Bost
 12. Grants and Endowments — Phillips
 13. Meeting Site — Lewis
 14. Nominating — Prouty
- IX. OLD BUSINESS
- X. NEW BUSINESS
- XI. NOMINATIONS FROM THE FLOOR
- XII. ELECTIONS
- XIII. CLOSING REMARKS
- XIV. ADJOURNMENT

If any member wishes an item placed on the agenda, contact President Kincaid.

SOFT CONSIDERING FUTURE MEETING SITES

The meeting site selection process begins with the written offer by a member to serve as a meeting host. Are you creative, organized, an initiator? Or do you have a secretary or assistant with these characteristics? Hosting a meeting requires a commitment to provide SOFT members with a forum for exchanging ideas and scientific data in a comfortable environment at a reasonable cost. If you feel you have the required dedication and organizational skills to host a future SOFT meeting, contact:

Mark Lewis, Chairman
Site Selection Committee
24 Rip Van Lane
Ballston Spa, NY 12020
Telephone: (518) 457-1208

NOMINATING COMMITTEE SLATE

The Nominating Committee has submitted the following as candidates 1987:

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VICE-PRESIDENT

Alphonse Poklis, Ph.D.

TREASURER

James C. Valentour, Ph.D.

DIRECTORS

William H. Anderson, Ph.D.

Richard N. Phillips, Ph.D.

For further information regarding these candidates, please consult your June ToxTalk.

MEMBERSHIP DIRECTORY UPDATE

If the information noted in the 1985 SOFT Membership Directory is incorrect, incomplete, or has changed, or if you are not listed in the Directory, please complete and mail the following.

NAME _____ Degree _____

MEMBERSHIP STATUS: Charter Full Affiliate Student TELEPHONE () _____

ADDRESS: _____

_____ Office _____ Home

Mail to:

SOFT, c/o 1013 Three Mile Drive, Grosse Pointe Park, MI 48230

NEW SOFT MEMBER SOON TO BE JOINED BY HOPEFUL APPLICANTS

Secretary Hodnett reports the following new member:

Jay B. Williams, B.S. — Full Member

There are a number of additional persons whose applications have not yet been completely processed and, if accepted, will be announced in the next issue of ToxTalk.

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JAT SPECIAL ISSUE

The SOFT special issue of the Journal of Analytical Toxicology has been distributed to subscribers. Co-editors Yale Caplan and Marina Stajic wish to

thank those members who contributed or reviewed articles for another great issue. Complimentary copies will be available at the SOFT/CAT meeting.

DUES NOTICES MAILED Please Pay Your Dues Promptly

Treasurer, Mike McGee, reports that the dues notices have been mailed. Please submit your dues payment as soon as possible. If you have not received your notice, please contact Mr. McGee.

Also, with the anticipated changes in the tax laws, it may be advantageous to consider paying professional dues, etc. in this tax year.

SUBMIT ALL MATERIALS FOR TOXTALK TO:

Patricia Mohn-Monforte
ToxTalk Publications Editor
1013 Three Mile Drive
Grosse Pointe Park, MI 48230-1412
(313) 884-4718

PLEASE SEND ITEMS FOR THE NEXT ISSUE
OF TOX-TALK BEFORE DECEMBER 1ST

PROFESSIONAL CALENDAR

Oct. 29 - Nov. 1, 1986: SOCIETY OF FORENSIC TOXICOLOGISTS — CALIFORNIA ASSOCIATION OF TOXICOLOGISTS joint meeting, Reno - Lake Tahoe, NV. Contact Norman A. Wade (Telephone: 919-549-8263)

Feb. 17-21, 1987: AMERICAN ACADEMY OF FORENSIC SCIENCES annual meeting, Town and Country Hotel, San Diego, CA. Contact AAFS, 225 S. Academy Blvd., Colorado Springs, CO 80910 (Telephone: 303-596-6006)

July 28-31, 1987: INTERNATIONAL ASSOCIATION OF FORENSIC TOXICOLOGISTS, Banff, Alberta. Contact Graham Jones, Ph.D., TIAFT '87, 4070 Bowness Road, N.W., Calgary, Alberta, Canada T3B 3R7.

Aug. 2-7, 1987: INTERNATIONAL ASSOCIATION OF FORENSIC SCIENCES 11th Meeting, Vancouver. Contact IAFS, Suite 801, 750 Jervis Street, Vancouver, B.C., Canada V6E 2A9.

Sept. 29 - Oct. 2, 1987: (tentative dates): SOFT National Meeting, Key Biscayne, FL. Contact Leonard Bednarczyk, Ph.D., 834 Northwest 23rd Street, Room 203, Miami, FL 33127 (Telephone: 305-638-5765).

1988: SOFT Annual Meeting, Philadelphia.

REMINDER — SEND YOUR COMPLETED MEMBERSHIP UPDATE FORM TO:

S.O.F.T.
c/o 1013 Three Mile Drive
Grosse Pointe Park, MI 48230

Due to a printing error, the graph referred to in the SPECIAL FEATURE: Cocaine/"Crack" article was omitted. Below is the table noted in COCAINE DEATHS IN VIRGINIA.

TABLE 1--Concentrations of cocaine/benzococgonine in cases 1-12 (postmortem)

CASE	BLOOD		BRAIN		LIVER		GASTRIC	
	cocaine (mg/L)	benzococgonine (mg/L)	cocaine (mg/kg)	benzococgonine (mg/kg)	cocaine (mg/kg)	benzococgonine (mg/kg)	cocaine (mg/L)	benzococgonine (mg/L)
(1) I	12.8	6.6	53	3			4.8	
							(560 total)	
(2) I/E	0.07	6	0.8	2.7				
(3) I	0.3	2	4	1.7	0.2	5	9	0.5
(4) †							16	0.2
(5) †	0.9				1.8		47	
(6) E	11.7				18.8mg/L (bile)			
(7) I	24	18			48	100		
	(methamphetamine also present: 1.0mg/L in blood and 2.1 mg/Kg in liver)							
(8) †	1.1	2.7	>10	0.8				
(9)	1.7	11						
(10)	17	14						
(11)	1.6	4.6	17	3.4				
(12) I	14.8		47.1		11.8		26mg total	

- * The symbol after the case number indicates route of entry, if known:
 I = ingestion
 E = inhalation
 † = intravenously

