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President's Corner Michael I. Greenberg, MD, MPH, FAACT



Thinking about Michael

Mike Shannon is being eulogized by many people who knew him well and that is just as it should be. They certainly knew him better than I, so it simply would not be

appropriate for me to try to gin up a eulogy for this man for, unfortunately, I really didn't know him very well at all. I worked on one or two group efforts with him over the years, spoke to him on the phone a handful of times, and wrote a chapter for the book he co-edited. We chatted briefly at various meetings but that was about it. I respected him for his kind, soft-spoken demeanor and his gentlemanly way. I was aware of his stature and his accomplishments and, while we were friendly, we weren't close friends. We were colleagues and cordial, albeit superficial, acquaintances. However, I, like so many others I have spoken to, simply cannot get Michael off my/our minds since hearing about his passing. I'm willing to bet that almost everyone reading this has been seriously obsessing about Michael's passing. Why has the death of this person, who I have spoken to only a handful of times, affected me/us so deeply? I'm not 100% certain, but I think I know.

First, Michael's passing was unexpected and untimely; shocking really. When such a loss happens we are "stopped in our tracks" and feel like we got sucker punched. Second, any of us can see ourselves in Michael; after all, we are all clinical toxicologists. Third, many of us are in and around Michael's age range; he was 55 years of age. So....I guess not only do we feel the severe loss of this amazing human being but we fear we could be next. To be sure, none of us wants to be next to...pass on at too young an age, leave a loving family, friends and colleagues too soon and leave our work and our destiny unfulfilled.

So...what do we do now?? How to think about this terrible tragedy? When the obsessive thoughts fade over the next few months- where does that leave us?

When my father died seven years ago, the Rabbi who presided at his funeral told the mourners that no matter how much they wished and hoped and prayed; the dead don't return. But, he suggested, that there is something we can do that would help us get through the terrible sense of loss and also honor my Dad. The Rabbi instructed us to live our lives "the way he (my Dad) would have wanted us to". And then he said "you know what I mean" and that was the end of the Rabbi's instruction. It turns out the Rabbi was right; it's the only way.

So I am thinking about Michael Shannon, now that he is gone, and I wonder how he would counsel me to live my life (professional and personal) if he were here. I wonder if he wouldn't be telling me: "life is too short, get busy enjoying it. Call and spend more time with your friends and your family. Get to know your colleagues beyond the narrow role they play in your life. Put aside those grant applications, partially written manuscripts, book chapters and go do something that you really like to do as often as you can. Limit the number of things you "have to" do. Take care of yourself. Step down from that committee you have served on after a year. Say "no" to a few more things and "yes" to only those things that you really, really, really care about. Be kind to the people around you: your students, your patients, your friends, your family, your residents, your co-workers, your colleagues. Forget about the insults or slights or other sundry negative acts that someone may have inflicted on you; intentionally or otherwise. Forgive those around you as often and as sincerely as you can; we all do stupid stuff from time to time...it's really of no moment in the grand scheme of things."

As I spend my time these days thinking

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about Michael Shannon, I will be trying to do all of the above because based on what the people who really knew him will say, these are the things he might be telling any of us if he could. Apparently that was the kind of guy he

was.

So paraphrasing the Rabbi...let's all try to live our lives going forward just the way Michael would have wanted us to.....you know what I mean.

Venom Week Conference in Albuquerque; June 2009

Jamie Nelsen, PharmD



For those who haven't heard, Venom Week 2009 is the third conference in a series of international scientific symposia about all things venomous.

The conference will take place in Albuquerque, New Mexico, June 1st-4th.

The Venom Week Symposia bring together zoo and other animal care workers, basic scientists, clinicians, regulatory agencies, antivenom producers, and others with an interest in venomous animals. The planned sessions will be diverse and include discussions on: marine animals; venomous snakebite management; zoo and quasi-public collections; venomous animal conservation; veterinary toxicology; regulatory issues; envenomations in pregnancy; taxonomy controversies; spiders; scorpions; squamates; an update on coral snake antivenom; and a wilderness medicine session. For complete details, please visit the website: <http://hsc.unm.edu/conf/venomweek2009/>

A few important items worth mentioning:

- 1) Registration: information and the registration form can be found here: <http://hsc.unm.edu/conf/venomweek2009/Registration.shtml>
- 2) Abstracts: There's still plenty of time to submit abstracts for presentation,

either as a platform or poster. Scientific and didactic abstracts are solicited for presentation regarding venomous animals, their venoms, antivenoms, clinical management of envenomations, collections management, regulatory issues, taxonomy, and other related topics. The deadline for consideration of platform presentations is April 17. Additional information may be found: <http://hsc.unm.edu/conf/venomweek2009/Abstracts.shtml>

- 3) Agenda: Although the conference will continue to take shape as abstracts come in and those sessions are scheduled. Check it out, so far: <http://hsc.unm.edu/conf/venomweek2009/Schedule.shtml>
- 4) Brochure: A downloadable brochure is available online: <http://hsc.unm.edu/conf/venomweek2009/Brochure.shtml>
- 5) CME: Keep in mind that CME credit is included in the registration, and credit is also available toward satisfying Fellowship criteria of the Wilderness Medical Society.
- 6) Information regarding sponsors, supporters, and exhibitors can be found here: <http://hsc.unm.edu/conf/venomweek2009/Sponsors.shtml>

Correspondence

Re: Drug Information Question, *AACTion* February 2009



Ian White, MD

To The Editor:

I noticed with interest the article on serotonin toxicity by Christine Stork in *AACTion*. While it is a good brief summary of the area I must take issue with the list of potential causes including "All antidepressants (MAOIs, SSRIs, TCAs, atypicals, etc)" There is good evidence of serotonin toxicity only for clomipramine and imipramine from the tricyclic antidepressants (TCAs) - none of the other more

noradrenergic TCAs is associated with serotonin toxicity.

Amongst the atypicals, the evidence for mirtazapine as a cause is extremely poor - in fact it has been successfully used to treat serotonin toxicity (Hoes MJ, Zeijpveld JH. Mirtazapine as treatment for serotonin syndrome. *Pharmacopsychiatry*. 1996;29:81). There is no evidence that reboxetine can cause serotonin toxicity (and no pharmacological reason it should).

A better list (arranged by mechanism of action) would be:

Drugs that have been associated with serotonin toxicity*

Serotonin reuptake inhibitors

- Selective serotonin reuptake inhibitors: fluoxetine, fluvoxamine, paroxetine, citalopram, sertraline, escitalopram
- Other antidepressants: venlafaxine, duloxetine, clomipramine, imipramine
- Opioid analgesics: pethidine, tramadol, fentanyl, dextromethorphan
- St John's wort (*Hypericum perforatum*)

Monoamine oxidase inhibitors

- Irreversible monoamine oxidase inhibitors: phenelzine, tranylcypromine
- Reversible monoamine oxidase A inhibitors: moclobemide
- Others: linezolid, methylene blue

Serotonin-releasing agents

- Fenfluramine
- Amphetamines
- Methylendioxyamphetamine (MDMA; ecstasy)

Miscellaneous

- Lithium
- Tryptophan

It is also important to realise that while there are several drug mechanisms that cause excess serotonin, severe serotonin toxicity only occurs with combinations of drugs acting at different sites, most commonly including a

monoamine oxidase inhibitor and a serotonin reuptake inhibitor. Less severe toxicity occurs with other combinations, overdoses and even single-drug therapy in susceptible individuals.

*Adapted and updated from Isbister GK, Buckley NA, Whyte IM. Serotonin toxicity: a practical approach to diagnosis and treatment. *Medical Journal of Australia* 2007;187(6):361-5

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C. Stork, PharmD

Author's reply:

I enjoy and appreciate the readership of my brief review regarding serotonin syndrome. I am in full agreement with many of the comments. As I hope was suggested, my review was not intended to be a complete resource regarding potential causes of serotonin syndrome.

I agree using pharmacologic categories as a whole may over-represent all drugs with evidence of serotonin syndrome at this time. However, mechanistically, it does appear that the specific serotonergic drugs without reported cases may yet still be at risk of causing this syndrome, and that documentation may lag, as was the case in reports regarding fentanyl and linezolid. In fact, there are 3 case reports thus far indicating that mirtazapine may be involved in the development of serotonin syndrome. At this point, I would have to reflect that I would be remiss in excluding it as a potential causative agent.

1. Benazzi F. Serotonin syndrome with mirtazapine-fluoxetine combination. *Int J Geriatr Psychiatry* 1998;13:495-6.
2. Demers JC, Malone M. Serotonin syndrome induced by fluvoxamine and mirtazapine. *Ann Pharmacother* 2001;35:1217-20.
3. DeBellis RJ, Schaefer OP, Liquori M, Volturo GA. Linezolid-associated serotonin syndrome after concomitant treatment with citalopram and mirtazapine in a critically ill bone marrow transplant recipient. *J Intensive Care Med* 2005;20:351-3.

AACT Develops Board Service “Boot Camp” for New Trustees

G. Randall Bond, MD, FAACT



As part of his plan to broaden and deepen the capacity of the AACT to perform more effectively, improve service for its members, and respond to opportunities, President Greenberg commissioned me to develop and

present a “board service boot camp”. This task was to delineate the responsibilities and provide training in the skills necessary to function on a board—individually and collaboratively.

This has been a more interesting task than I had imagined, and one with great potential to improve our effectiveness and develop future leadership. The AACT is not alone in starting on this road: In the last 10 years, particularly in the wake of scandals of abuse of leadership position for personal gain that nearly destroyed the United Way and other non-profits (and did destroy for-profit corporations like Enron), the IRS and state charity regulators have been cracking down on non-profits. They--and the public--asked, “Why was the board asleep?” In that milieu, the days of passive participation as “board service” are over. To provide the resources to respond, many attorneys, academics and a coalition of non-profits-- Boardsource, have developed a myriad of resources.

Using these resources I designed the course in four parts: A. Duties and responsibilities of a board and of board members, B. Organizational finances and understanding financial reports, C. Making an effective board meeting and D. Developing and empowering effective committees.

At our recent winter board retreat the board got the first installment. We started with the responsibility of the whole board, governance, and the four governance responsibilities of a board:

- 1) Mission, Vision and Values—define, refine, review, renew
- 2) Oversight—of policy, of finances, of executive (president or CEO)
- 3) Resource procurement (fundraising, ensuring financial stability and finding the right future board members/committee chairs) and
- 4) Connectedness to community served and external community (know, listen, respond, ambassador).

We then moved to the individual board member, covering the fiduciary responsibility and the three legal responsibilities: the duty of care, the duty of loyalty and the duty of obedience. Along the way there were stories of failed and recovered boards and exciting topics like the impact of Sarbanes-Oxley on non-profits, the role of IRS form 990 and a primer on Directors and Officers Insurance. I know the board cannot wait for the next installment!

Actually it was well received and has helped set the foundation for further board engagement. Along with the board manual under development by President-elect Woolf, the project should smooth the way for future board members and officers and allow them to “hit the ground running”.

Save the Date: The 2009 NACCT Meeting in San Antonio, TX will be held September 21- 26. A post-symposium MRO course on September 26 & 27, 2009 immediately follows NACCT 2009, and will satisfy the US DOT pre-requisites for certification as an MRO for workplace drug testing reviews.

AACT Launches New Web Site March 23, 2009

Michael G. Holland, MD, FAACT



New Web Site Developed

By the time you read this *AACTion* issue, the new AACT web site should be up and running. AACT President Michael I. Greenberg announced on the front page of the Academy's new web site

that the hard work of the Academy Board and its Technology and Communications Committee has finally paid off with the launching of the updated website. The new site is taking over the domain name of the current website, such that web browsers will automatically migrate to the new website when you click on the current web address: www.clintox.org.

Many new features have been developed for the new website, including enhanced security, updated toxicology links, new formatting, and better user interface. Most notable will be the modern, updated appearance of the site, which has not had a face change in over 10 years (eons when you think of how quickly things change in this age of computers).

When you go to the new site's members-only

area for the first time, you should logon with your last name and birth date as you currently do. The site will immediately direct you to a page where you change your password to a more secure one of your choice. This enhances security of your personal data, and will allow on-line payment of membership dues within the next 30-60 days, through our PayPal secure payment account.

We are confident you will like the improvements. However, website development and maintenance is much like property maintenance at your home: you plant trees, bushes, grass and landscaping; you take care of it, and it grows. But to keep it looking good and being functional for you, it has to be maintained regularly: trees trimmed, lawn mowed, and repairs and updates made when needed. We will treat the new website like that- with constant attention, maintenance and care.

Dr. Greenberg and I urge all members to try the new website and get a feel for it, as well as to make suggestions as to how we can improve it and make it more useful for our members. Please visit the new website and help us keep it looking and working great.

Upcoming Meetings

NACCT 2009
September 21-26
San Antonio, Texas
www.clintox.org

ACMT Spring Meeting
March 27/28, 2009
San Juan, Puerto Rico
<http://www.acmt.net>

XXIX International Congress of the European
Association of Poisons Centres and Clinical
Toxicologists
May 12-15, 2009
Stockholm, Sweden
www.eapcct.org/show.php?page=congress

American Occupational Health Conference
ACOEM Annual Scientific Meeting
April 26-29, 2009
San Diego, Ca
www.acoem.org/conferences.aspx

Venom Week 2009
June 1 - 4, 2009
Albuquerque, NM
<http://hsc.unm.edu/conf/venomweek2009/>

Society of Forensic Toxicology
SOFT 2009
October 18 - 23, 2009
Oklahoma City, OK
<http://www.soft-tox.org/>