

ADVANCES IN EXPOSURE PREVENTION

A Publication for the Prevention of Occupational Transmission of Bloodborne Pathogens

VOL. 5, NO. 6 2001

Published by the
International
Health Care Worker
Safety Center
at the University of Virginia

Center website:
[www.healthsystem.virginia.edu/
internet/epinet](http://www.healthsystem.virginia.edu/internet/epinet)

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A Surgeon, a Suture Needle — and Hepatitis C

AEP interviewed a surgeon infected with hepatitis C, presumably from an occupational exposure; although “Dr. Jones” (not his real name) wished to remain anonymous for this article, his willingness to come forward and speak to us was unusual. His experience sheds light on the personal and professional realities confronting an infected health care worker, and the factors that determined his professional future.

Dr. Jones is chief of plastic and reconstructive surgery at an academic medical center; he is married and the father of four children.

AEP: In what year did you start performing surgery?

Dr. Jones: During my residency, starting in 1979. I went through five years of residency training, then started my own practice in 1984.

AEP: It's historically significant because measures to prevent occu-

pational exposures were implemented gradually during the late 1980s and early 1990s, and a test for hepatitis C wasn't available until 1989.

Dr. Jones: It's hard to imagine, but back in 1979-80, at the beginning of my residency, I remember coming out of the operating room literally soaked in blood, from the waist down—pants, underwear, socks, shoes. And I'd sit down and have a cup of coffee in my blood-soaked clothes, and then I'd go back in to fight again. I remember going into someone's chest in the emergency room with just sterile gloves—no gown or goggles—



Photo by Jackson Smith, courtesy U.Va. Health System

Operating room personnel sustain more percutaneous injuries than any other health care workers.

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because he had been shot in the heart and had gone into cardiac arrest. And when you did put on sterile gloves, it was to protect patients from you, not the other way around. You were bathed in blood regularly, got stabbed with instruments. It was no big deal. You just changed the instrument and got back to work. There was little protection.

AEP: *So you didn't have a documented exposure that you could correlate to your HCV infection?*

Dr. Jones: That's right; it was rare to report exposures back then. But I suspect that my infection occurred sometime during my residency. There was one particular patient I'll always remember. I was using a large retention needle, and really got harpooned. These are very large suture needles, maybe 3-1/2 inches long, that are used for big closures that are subject to a lot of stress. I remember getting cut really badly, and the patient having non-A non-B hepatitis. As I look back, that could have been the event that led to my hepatitis C infection. But that was before a test for hepatitis C was available.

AEP: *How did you find out the patient had non-A non-B hepatitis?*

Dr. Jones: In the course of treating the patient we discovered she had elevated liver enzymes, and everyone was worried that she had hepatitis B. We tested her for that, but she was negative. We concluded that she had some form of hepatitis, but not A or B.

I remember getting very sick in 1981, during my residency. I was out of commission for about a month, and my liver enzymes were elevated. At one point they thought I had mononucleosis, but I tested negative for it, and was also negative for hepatitis B. Then, after about a month, I recovered and went back to work.

AEP: *Did you have any other risk fac-*

tors for hepatitis C, outside of work?

Dr. Jones: I never had surgery requiring a blood transfusion. I had a septum fixed and wisdom teeth removed, and that was it for surgery. I did not have any tatoos, had never been on drugs. I had no other risk factors.

AEP: *Do you recollect how much time elapsed between the exposure event you described and your first illness?*

Dr. Jones: It was about a year. I had horribly elevated liver enzymes, but I did not have jaundice. After that illness, I finished my residency and went into private practice. I did not give it any more thought until ten years later, when I got very sick

again—that was 1992. Again they thought I might have mono; they checked my liver enzymes, which were about twice the normal level. At that point a marker for hepatitis C had finally been discovered, and that was when I tested positive for HCV. A liver biopsy was performed, and it showed moderate inflammation with signs of chronic, persistent HCV infection.

I was having a hard time practicing. I would do a couple of cases then would have to go home. I was sweating all the time and lost weight; I was nauseous, had constant diarrhea and no appetite. That's when my doctor offered me treatment with interferon. He said it was grueling,



Safety Checklist for the OR

- Are blunt suture needles, stapling devices, adhesive strips or tissue adhesives used whenever clinically feasible in order to reduce the use of sharp suture needles?
- Are scalpel blades with safety features used, such as round-tipped scalpel blades and retracting-blade and shielded-blade scalpels?
- Are alternative cutting methods used when appropriate, such as blunt electrocautery devices and laser devices?
- Is manual tissue retraction avoided by using mechanical retraction devices?
- Has all equipment that is unnecessarily sharp been eliminated?
(Example: towel clips have been identified as a cause of injury in the operating room, yet blunt towel clips are available that do not cause injury and are adequate for securing surgical towels and drapes. Other examples of devices that do not always need to have sharp points include surgical scissors, surgical wire, and pick-ups.)
- Is double gloving employed in the surgical setting?
- Do circulating nurses, as well as personnel close to the surgical site, wear eye protection such as goggles or faceshields that have a seal above the eyes to prevent fluid from running down into the eyes?

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but thought I should go ahead and try it. I took it for three months while I was still practicing. After the treatment, my liver enzymes were back to normal.

About six months later I got ill again. This time, the tests showed that my liver enzymes were normal, but I was feeling terrible. So I reduced my work schedule and took it easy for a while. After about a year, I felt fine, but my liver enzymes had gone back up! It made no sense. I had another liver biopsy and it showed a little fibrosis this time, so they wanted to put me back on interferon. I was told I probably would not be able to practice this time, while I was taking the drugs; so I left my private practice for about three months and went to another part of the country. I was tired of people asking questions, wondering if I had AIDS or liver cancer or some other disease. I did not want to reveal that I had hepatitis C. But eventually it got out after I left.

AEP: How did that happen?

Dr. Jones: I was getting my own medicine from the hospital, and people started to talk—“Oh, Dr. Jones is ill.” By the time I got back, everyone knew I had hepatitis C. When you are a physician and you are gone for three months, rumors start to fly—people automatically assume you are a drug abuser, an alcoholic, or deathly ill.

When I got back, I was still on interferon and was going to try to practice three days a week, on the days when I wasn't taking it. But my colleagues told me, “Look, we don't feel comfortable referring patients to you because you have hepatitis C, and we could get sued for that, because we knowingly sent our patients to you.” They said if I told my patients that I had HCV, they would feel comfortable referring people. Well, I tried that a few times, and it just did not

work. As soon as patients find out you have hepatitis C, they suddenly change their minds about having surgery.

At that time—around 1992-93—I had two lawsuits filed against me. One was for a scar from an abdominoplasty operation I performed. In the course of the litigation, the patient's lawyer found out I had hepatitis C and added a claim for emotional distress, saying that I did not properly inform my patient about my condition and that she was now deathly afraid she might have been infected. Soon after, another patient sued me for a silicone breast implant. The patient claimed the implant ruptured—this was during the “silicone wars.” And again, attached to that suit was a claim for lack of informed consent about my hepatitis C. One of the lawsuits cited a case in which a surgeon who was a recovered alcoholic and a member of AA was successfully sued in court, on the basis that the patient had a right to know that the surgeon was a recovered alcoholic. The decision was upheld by the state supreme court.

Because of all this uproar, one of the hospitals where I had surgical privileges formed a committee to discuss the issue of my hepatitis C and informed consent. Their final recommendation was that I inform my patients about my HCV status. I was on friendly terms with the people at this hospital; they were providing my in-

terferon free of charge, because the drug was considered experimental at the time and insurance didn't cover it. At that time, it cost between \$400-\$600 a month. I was on and off it for eight years—I kept failing treatment, with continued symptoms and ele-

Between a rock and a hard place:

“The disability company said to me, ‘Having hepatitis C is not sufficient reason to claim disability anymore. Because, according to the CDC, having hepatitis C should not put restrictions on your practice.’

But in courts of law, issues of informed consent are settled in favor of patient-plaintiffs. When it comes to getting hospital privileges, neither courts nor hospital administrators are going by the CDC position regarding HCV-infected physicians—but disability carriers are. They are saying an HCV-infected physician should be able to practice without restriction.

That leaves infected surgeons between a rock and a hard place: Should they inform patients of their serostatus, as the AMA advises, and risk losing their practice—and their disability—or practice without restriction, but risk being sued by patients for lack of informed consent?”

—“Dr. Jones,” HCV-infected surgeon

ivated liver enzymes.

The lawsuits, which were ongoing for about six years, were eventually dropped. The patient who brought the silicone breast implant suit ended up suing the manufacturer of the implant instead. As far as I know, neither of the patients developed hepatitis C. But, of course, I still had to pay the attorney's fees.

At that point I really had to reconsider my career path. No patients

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wanted to see me, I had been sued twice, my colleagues did not want to refer patients to me, the hospital where I worked required me to tell my patients that I had hepatitis C. What should I do?

But I struggled on for the next couple of years, trying to maintain my practice. Things just became worse and worse, however, and by 1995 I could not afford to stay in practice because of lack of patients, and because I was ill. So I finally gave up. You can only fight the system so much.

Within a month of the time I closed my plastic surgery practice, I was called by the chairman of the surgery department at a nearby state university. He understood my situation and invited me to join the faculty, strictly in a teaching role. I would oversee and instruct the residents under me, and they would perform the actual surgery. I provided the knowledge, the resources, and the direction.

For me, it was a great opportunity: it meant I could still be involved in medicine in some capacity, and use my experience to teach others. I definitely wanted to give it a try. So, in March of 1995, I joined the faculty at the university. It turned out to be a great situation. I would go to the operating room with the upper-level residents under my supervision, and diagram on the chalkboard the opera-

tion they were going to perform. I would tell them what to do, and they would do it. During the operation I had a laser pen and a pointer to aid in giving them directions. Occasionally I would scrub in, and would push and pull, using a blunt hemostat, to show them where to go, but they did all the cutting and sewing. I was double-gloved, of course, which helped ease my own fear of infecting patients.

the training is performed on animals.
Dr. Jones: Yes, that would be a possibility. Another is something called “Zeus,” a computerized virtual-reality surgery program where you operate with hand-held devices in another room using the computer, and the actual surgery is done by a robot. There are usually scrub techs or residents in the room with the patient who place the instruments to

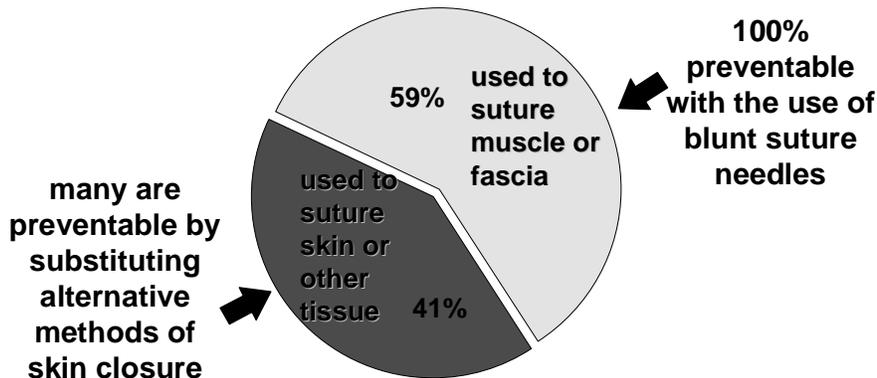
get the robot going, and the surgical staff is in the other room operating.

AEP: *That sounds like a new horizon for you.*

Dr. Jones: It is about ten years away from being perfected. So for now, I teach others. My biggest fear in the operating room is getting stuck by one of the residents, who are relatively new to surgery.

Figure 1. Potentially Preventable Suture Needle Injuries

6 hospitals, 15 months, suture needle injuries=197



From: Jagger J, Bentley M, Tereskerz P. A study of patterns and prevention of blood exposures in OR personnel. AORN Journal 1998;67(5):979-996.

The hospital was very comfortable with this arrangement. It did not have an explicit policy about infected surgeons, and I did not sign any written statement. It was a gentlemen’s agreement. I was very grateful to have a job, and they were happy to have me, so it turned out to be a great partnership.

So that has been my life for the last six years. I rarely wield a knife, unless there is an urgent need to do so.
AEP: *Sounds like a great example of the medical community taking care of its own.*

Dr. Jones: Absolutely.

AEP: *Another alternative for someone in your position might be conducting training for endoscopic procedures, since*

Of course, I only have one type of hepatitis C, and there are several variants of it. I have been stuck by residents a couple of times—one time with a needle-tip Bovie coagulator. The device was plugged in when I got stuck, so I got an electrical shock at the same time. I assume any pathogens would have been killed by the electricity, so I’m not worried about another infection. I was also stuck with a “rake,” a retractor with sharp little claws on it. A resident was using it to pull a piece of tissue out of the way; it went through the tissue and stuck my finger.

AEP: *Of course, with sharps exposures we always want to know what the device was and whether it needed*

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to be sharp, particularly in the surgical setting. If I'm not mistaken, in both those situations, with the Bovie and the rake, a sharp-edged device was not necessary.

Dr. Jones: That's correct—there are blunt Bovie's and blunt retractors. I think the sharp versions should be removed from the operating room altogether. There are many unnecessarily sharp instruments that endanger health care workers that ought to be removed from the OR.

AEP: *The number-one sharp device to get out of the OR is the sharp suture needle—there are very few cases where this device is really necessary. Blunt suture needles can be substituted for the suturing of less-dense internal tissues; for cutaneous closures, you can use staples or tissue adhesives or adhesive strips.* [Editor's note: See Figure 1, page 56.]

Dr. Jones: You are talking to a plastic surgeon now, and if I told you I was going to close your eyelids with staples I think you might get a little upset.

AEP: *I'm sure you have to be selective about the use of staples. What about tissue adhesives, what is your opinion of them?*

Dr. Jones: I use them frequently, but you can't use them around the eyes, and you can't use them around the mouth or inside the nostrils.

AEP: *It would be useful to develop an inventory of surgical procedures, with a list of all the sharp items that can be eliminated from those procedures.*

Dr. Jones: Absolutely. I would have sharp towel clips removed from every operating room in the country right now. Those are ridiculous—who needs them?

My objective now is to stop the transmission of these diseases to health care personnel. I have to tell you that being infected with hepati-

tis C has ruined my life. My life as I knew it, with all the training I underwent to be a plastic surgeon, is over. The crazy thing is that it could have been prevented so easily. It is all a question of awareness. Today, everybody is aware of the risk of in-

“My life as I knew it, with all the training I underwent to be a plastic surgeon, is over. The crazy thing is that it could have been prevented so easily... We are heading in the right direction of being more aware and better protected—but we still need to go much further.”

-Dr. Jones

fection. We are heading in the right direction of being more aware and better protected—but we still need to go much further.

AEP: *Getting the attention of surgeons on this issue has been very difficult.*

Dr. Jones: Well, they need to realize the potential consequences of an infection. Your life is ruined, and the financial consequences are devastating. After I got sick, I was able to get disability, but I never got workers' compensation because I

never filed a claim. I didn't know exactly when I got infected, because there was no test for hepatitis C, and I was in training at the hospital where I had that major exposure—I did not want to rock the boat. And, of course, now it is too late. But at least I had the disability.

Recently, though, my disability has been cut off. I am paid for my teaching, but it is very little compared to my former income. It is enough for food and shelter, but certainly not enough to put my four kids through college or lead the lifestyle that I trained and struggled so hard to have.

AEP: *What happened with your disability?*

Dr. Jones: The disability company said to me, “Having hepatitis C is not sufficient reason to claim disability anymore. Because, according to the CDC, having hepatitis C should not put restrictions on your practice.”

AEP: *That is an unintended use of the CDC position.*

Dr. Jones: It's frightening. According to my disability company, which is one of the major carriers in the country, having hepatitis C or HIV is not a reason to restrict your practice. That is a point of view that will scare any surgeon in private practice. If the carrier ends up being successful in denying me disability on this basis—obviously I am going to have to go to court with them—you are going to have more infected surgeons hiding in the closet than ever before. You know, if I had kept my mouth shut, I could have kept practicing.

Regarding the issue of informed consent, I think that if someone is physically able to work and is totally asymptomatic, they should be able to practice. But I also think that patients need to be informed of their surgeon's sero-status, based on ethical and legal considerations. Surgeons should do everything in

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their power to make their surgical practice as safe as possible, by using protective equipment such as mesh gloves and blunt suture needles. And infected surgeons should avoid performing exposure-prone procedures.

AEP: *Your experience was that once you informed your patients, you did not have any more patients.*

Dr. Jones: That is true, and it is a difficult decision to make. But I feel it is still the patient's right to know. I think most of the time you are going to find people like me saying, "I better make sure I never expose a patient to this illness." Of course, one option is to switch specialties to something like family medicine or radiology. Or, if I wanted to continue practicing plastic surgery, I could limit myself to teaching and to procedures like laser resurfacing, laser photocoagulation, children's port wine stains, chemical peels, and microdermabrasions.

AEP: *Is there a need to inform patients who have these kind of procedures of your HCV status?*

Dr. Jones: I don't think so if the procedures are non-invasive. Of course, there are some aspects of this issue on which I have not reached a conclusion. For instance, if I were a general surgeon and I had hepatitis C, I would just restrict my practice to non-exposure-prone procedures. But if I were a heart or orthopedic surgeon with HCV, I would probably just quit, because most of their procedures are exposure-prone.

AEP: *Have you thought about switching specialties?*

Dr. Jones: Oh yes. I've thought

about going into psychiatry or radiology. But I've kind of carved out a niche for myself in a totally different avenue of plastic surgery. I run a very large clinic where I direct wound therapy and treatment. It doesn't involve my doing any surgery at all—just seeing patients and taking care of wounds, particularly diabetics. That's where most of my research is now. It is very reward-

ably 20 years, and I have no evidence of cirrhosis. I'll probably continue to live like this, hopefully for a normal lifespan. My biggest fear, of course, is liver cancer. I may be in sustained remission right now, because I don't have any detectable virus—but that does not mean anything in terms of whether you're still infectious. Nobody can tell you whether you are cured or not.

AEP: *What kind of effect has your illness had on your family?*

Dr. Jones: Everybody works now—my kids are 20, 18, 16 and 11. Everybody has a job, including the 11-year-old. It was quite a change in lifestyle for them—from having everything to suddenly having very little security.

AEP: *Do you have any policy recommendations?*

Dr. Jones: I do not understand why we don't have a national policy on the issue of HCV-infected surgeons and invasive procedures. I think surgeons have a right to know if their patient is infected, and I think patients have a right to know if their physician is infected. At

Why don't surgeons report?

"As an occupational health nurse, I know that blood exposures are under-reported, particularly from the OR. Recently our surgeons appear to be even more reluctant to report blood exposures and have baseline testing performed. OR nurses helped me understand this when they invited me to speak to them about hepatitis C. Stories are circulating in the OR that a well-known surgeon withdrew from his practice due to HCV infection. Fear of inability to practice surgery, related to HCV, may contribute to even greater resistance among surgeons to report their exposures.

All of this made me think about what I could do, since HCV is treatable. I must ensure confidential testing results, educate health care workers about progress in treating HCV, and utilize this as an opportunity to actively involve surgeons in exposure prevention efforts."

- Occupational health nurse, Seattle, Washington

ing; if a diabetic is able to keep a leg, he or she is extremely grateful.

AEP: *Are you still on the interferon?*

Dr. Jones: No, I have been off the interferon for about a year and a half now. I have hepatitis C "fatigue attacks," where one day I am doing great, and then the next day I am totally wiped out and cannot move. It feels like the flu and lasts from 24 to 48 hours. I get them about once or twice a month—they are well documented in the literature on hepatitis C. I also get night sweats and myalgia. But my prognosis is good; I've been infected for prob-

ably 20 years, and I have no evidence of cirrhosis. I'll probably continue to live like this, hopefully for a normal lifespan. My biggest fear, of course, is liver cancer. I may be in sustained remission right now, because I don't have any detectable virus—but that does not mean anything in terms of whether you're still infectious. Nobody can tell you whether you are cured or not.

my hospital, of the two surgeons besides myself who are occupationally infected with hepatitis C, one has limited herself to teaching and the other is doing what I do, having the residents perform the surgeries. So there are three surgeons who are all adhering to the same self-imposed restrictions, because we do not want to give the disease to anyone else. If you have this disease and you have been through the hell, you would not want to pass it along to anyone else, not even your worst enemy—much less a patient. □