

Exposure of Patients to HIV and Hepatitis C During Surgical Procedures

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(Amazon.com Kindle Download for All Devices)

A Hidden Risk of Surgery

- What is this potentially deadly risk?
- Is it preventable? How?
- Surgeons have the knowledge and the technology to greatly reduce the risk- but often choose not to act. Why?
- The game-changer: informed patients and consumer pressure
- Exactly what patients can do – and must do – in order to protect themselves

The Public Needs to Know: You Could Become infected with HIV, Hepatitis C During Surgery

- HIV and hepatitis C are commonly found in surgical patients; many don't know they are infected
- US surgeons and assistants are injured with needles, scalpels and other sharp object 1000 times a day, exposing them to blood of potentially infected patients
- As a result, surgeons may become infected with HIV and/or Hepatitis C – and not know it for months or years
- Infected surgeons can transmit HIV and/or Hepatitis C to healthy surgical patients during surgical procedures
- HIV and Hepatitis C can also be transmitted to healthy patients via contaminated instruments and devices, such as colonoscopes and dialysis equipment

Costs of 1000 Daily *Preventable* Sharp Object Injuries and Exposures to Blood

- Care providers and patients may become infected
- Anxiety, stress, shock, pain, suffering (infection or not)
- Blood testing can take up to 6 months to find out if you have been infected with HIV
- These sharp object injuries cost the healthcare system more than \$1 billion annually for lab tests, medications, counseling and staff replacement

Almost Everyone Will be a Surgical Patient

- According to a recent study by the American College of Surgeons, the average American will have over 9 surgical procedures in a lifetime – It's not a question of *if*, but *when*?
- Surgical infections and errors are common; some can be deadly
- You can prepare yourself with knowledge and become an empowered safety advocate for yourself or a loved one
- As a consumer of health care, *you have the power to protect yourself. Will you use that power?*

The OR: a Risky Place for the Patient and the Surgical Team

- HIV, hepatitis C & hepatitis B are commonly found in surgical patients – 38% in one urban surgical practice (HIV 26%, Hep C 35%, HIV+HCV 17%, Hep B 4%)
- Surgeons usually do not report their injuries, depriving themselves of the opportunity to receive post-exposure treatment to prevent HIV and diagnose HCV early
- After a surgeon becomes infected, and subsequently is injured again, and his bleeding hand re-contacts that healthy patient's internal tissues, that patient may become infected. This risk does not appear on surgical consent forms and is not discussed pre-op with patients

Known Reported Cases

- 1987 – 1989: Florida dentist infected with AIDS transmitted HIV to 5 patients
- 1999: French orthopedic surgeon infected with AIDS transmitted HIV to a patient during a hip replacement
- 2003: Obstetrician in Spain transmitted HIV to a patient during a cesarean section
- 1991 -2005: worldwide, eleven surgeons infected with hepatitis C transmitted their infections to 38 patients, including 14 in the United States, and 12 surgeons infected with hepatitis B transmitted their infections to 91 patients, including 19 in the United States
- Tip of the iceberg ? What don't we know?

Additional Reports of Exposures

- 2005 – 2015: In multiple reported exposure incidents, hundreds to thousands of patients were, or may have been, exposed to HIV and/or hepatitis C during colonoscopy, dialysis, and major surgical procedures, due to improper cleaning and sterilization of equipment and needle sticks to surgeons

Most Exposures are *Preventable*, These are “Never Events”

- ***Safety Devices*** have been shown to prevent most sharp injuries and exposures to blood
- As required by federal law (*Needlestick Safety and Prevention Act* of 2000), employers (surgical/medical facilities) must provide for employees: safety designed injection needles / blood draw needles / IV catheters **safety scalpels* & blunt tipped (safety) suture needles***
- *Surgeons may choose not to use these if “*in their opinion, they interfere with patient care*” (In most cases they don't interfere, **yet only 5 to 10% of surgeons use them**)

Proof of Effectiveness of Safety Devices in Prevention of Injury and Blood Exposure 1

- **1. Blunt tipped suture needles** CDC study: zero % needle-stick injury rate, compared to 6% rate with traditional sharp suture needles
- American College of Surgeons (ACS) 2005 Bulletin - *Statement on Blunt Suture Needles*: “All published studies to date have demonstrated that the use of blunt suture needles can substantially reduce or eliminate needle-stick injuries from surgical needles. The ACS supports the universal adoption of blunt suture needles as the first choice for fascial suturing (closing incisions)”. Similar endorsements by American Academy of Orthopaedic Surgeons, Association of Perioperative Registered Nurses (AORN), Association of Surgical Technologists, the Association of Surgical Physician Assistants, OSHA, and the FDA.
- **SURGEON COMPLIANCE: 5%**

Blunt-tipped Suture Needle



Proof of Effectiveness of Safety Devices in Prevention of Injury and Blood Exposure 2

- **2. Passing sharp instruments using a “neutral zone”**, instead of passing them hand-to-hand
- ½ of all scalpel injuries (the 2nd most common type of injury) and ¼ of all suture needle injuries (the most common type of injury) occur when these sharps are passed from hand-to-hand
- Neutral Zone reduced collisions & sharp object injuries significantly (Stringer B, et al)
- **SURGEON COMPLIANCE:** sporadic

Neutral Zone (Hands-free Transfer Tray)



Proof of Effectiveness of Safety Devices in Prevention of Injury and Blood Exposure 3

- **3. Double gloving** reduces risk of exposure to patient's blood in multiple studies by as much as 87 percent
- ACS recommends the universal adoption of double gloving
- **SURGEON COMPLIANCE:** varies

Proof of Effectiveness of Safety Devices in Prevention of Injury and Blood Exposure 4

- **4. Safety Scalpels**
- Few studies, but intuitively and anecdotally helpful (Ten years of OB/Gyn practice)
- Do not interfere with patient care in most situations
- Resistance by surgeons: “They don’t feel the same” as the traditional (less safe) ones
- **SURGEON COMPLIANCE: 5% or less**

Safety Scalpel



Missed Opportunities to Protect the Patient and Surgical Team

- Safety scalpels and blunt (safety) suture needles have been available for 2 decades; they can prevent a majority of the 1000 injuries that occur daily

Why do only a minority of surgeons use them?

- Surgeons' resistance to change
- Infrequent and sporadic enforcement of OSHA regulations (too few OSHA inspectors), few penalties
- Facility administrators and hospital executives don't confront surgeons (lack of a strong culture of safety)
- ***THE ONLY SOLUTION LEFT: CONSUMER PRESSURE***

What Patients Need to Do: Find Transparency (learn about the risks); Apply Consumer Pressure

- **Speak up**, ask questions
- **Challenge** care providers to follow safe practices
- **Demand** safe care: *“In addition to washing your hands (It works; care providers are more likely to wash hands when they know patients are watching), I’d like you to use safety devices during my surgery”*
- **Be your own safety advocate** - and bring another one with you for backup, to Dr’s office, hospital, surgery center or clinic to prevent deadly medical errors
- **Use safety checklists** of your own, because surgeons don’t always use them

Checklist (1 of 6): What You Must Ask a Surgeon the *First Time You Meet**

- 1. Do you use blunt tipped suture needles to close your incisions?
- 2. Do you use a neutral zone for passing your sharps?
- 3. Do you double glove?
- 4. Do you and your OR team all use protective eyewear?
- 5. Do you use safety scalpels?

***Once you're scheduled for surgery, its too late!**

A Hidden Risk of Surgery Revealed:

- The risk: exposure to HIV and hepatitis
- It is mostly preventable
- Surgeons must change dangerous behavior but the healthcare system has failed to make that happen
- The only solution: informed patients and consumer pressure
- Patients (i.e. ***the public – all of us will be patients***) need to know what to ask
- Ask the right questions, speak up to protect yourself, your family member, even your surgeon! He or she will thank you

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