



Reduce Your Risk of Infection Before an Ambulatory Procedure

Outpatient or ambulatory healthcare clinics are facilities that provide surgery and diagnostic services outside of the hospital. Commonly performed outpatient procedures include endoscopy/colonoscopy, hemodialysis, cataract surgery, ear/nose/throat procedures, gynecological procedures, gall bladder removal, kidney/bladder procedures, arthroscopic/orthopedic procedures and hernia operations.

Outpatient surgery accounts for nearly two-thirds of all surgery visits, according to the Centers for Disease Control and Prevention (CDC). The outpatient setting is often more convenient and allows the patient to return home sooner than if the procedure was performed in a hospital.

Most patients who have surgery recover well. However, occasionally patients may develop an infection. A surgical wound infection occurs when germs from the skin or the environment enter the incision (cut) that the surgeon makes during the operation. A surgical wound infection can develop from two to three days after surgery to many weeks later – after it is thought that the wound has healed. Infections after surgery can lead to other problems such as admission to a hospital to treat the infection.

Infection control issues have been reported at freestanding healthcare centers. These include unsafe injection practices and the re-use of syringes. These lapses have resulted in the transmission of hepatitis B and C and the broad notification of patients to inform them that they may have been exposed to blood borne diseases.

As more healthcare is delivered outside the hospital, consumers can arm themselves by asking questions before undergoing a surgical procedure or receiving care at an ambulatory facility. The Association for Professionals in Infection Control and Epidemiology (APIC) offers this advice for prospective patients.

Important considerations

Infection prevention staff

Each facility should employ an Infection Preventionist either on staff or as a consultant to oversee their infection prevention program. The Infection Preventionist ensures that healthcare workers adhere to fundamental infection control practices including hand hygiene, injection safety and equipment sterilization. Unfortunately, there is often less oversight in ambulatory care clinics as opposed to hospitals which are more highly regulated. Ask if there is an infection prevention program and a staff person or consultant dedicated to this function. Find out how often they receive training or re-certification. Ongoing training and recertification of facility staff is essential. There should be an ongoing competency evaluation program designed to ensure staff follow approved procedures.

Cleaning and disinfection/sterilization policies

Equipment and instrument cleaning and sterilization is a complex process involving numerous technical details. There are multiple points where one tiny slip-up could result in an increased risk of infection. Each facility must have written policies and procedures on cleaning of instruments, operation of sterilizers, routine preventive maintenance of equipment and all other facets of operation. The facility must employ infection prevention professionals who are properly trained to monitor these processes. Ask who is responsible for ensuring that daily cleaning and disinfection as well as preventive maintenance of equipment is occurring. Find out if there are policies and appropriate checks on procedures for cleaning and sterilization of instruments and equipment.

Pre-procedure questions

Antibiotics

Giving antibiotics before some surgeries can help to prevent an infection. Find out if and when you will receive antibiotics. As a general rule, a single dose of antibiotics should be given one hour prior to surgery. If more than one dose is given it should be discontinued in 24 hours.

Site preparation

Discuss strategies for infection prevention with your healthcare team prior to surgery. Follow your doctor's instructions to shower or cleanse your surgical site with a special product (e.g., chlorhexidine) before arriving for surgery or other invasive procedures to remove bacteria from your skin. Ask your surgeon what product they use to clean the skin before they make the first cut. These prep solutions are most effective when they contain two active ingredients, one of which should be alcohol. Ask your surgeon how they prep the surgical site – for example, do they clip rather than shave the hair? You should not shave the area where you are having surgery. Shaving with a razor irritates the skin and therefore increases the likelihood of infection.

Warmth

Recent studies have shown that keeping patients warm during and after surgery may improve outcomes. Ask if maintaining normal body temperature will be an issue during your procedure, and if so, how you will be kept warm before, during and after surgery.

Glucose control

Maintaining blood glucose (sugar) control during and for two days after surgery may reduce the risk of complications and improve your outcome. Ask the surgeon if glucose control is an issue for your procedure and in particular, if you have diabetes, find out how your blood sugar levels will be managed during and after surgery.

Smoking cessation

If you are a smoker, consider a smoking cessation program. This will reduce your chances of developing an infection after surgery, and will increase your body's ability to heal.

Hand hygiene

Hand hygiene is the most effective way of preventing the spread of infection. The chances of developing an infection can be significantly reduced if healthcare staff cleanse their hands before and after examining patients. Please ask healthcare staff who come to examine you if they have washed their hands or used the alcohol hand rub. Do not feel embarrassed or awkward when requesting this information as they welcome your help in keeping you safe. As a patient you should also practice good hand hygiene after using the bathroom, before eating, after shaking hands, after blowing your nose, and before and after touching the bandage on your surgical incision. This applies to visitors and care providers at home as well.

Protective gear

Personal protective equipment, such as gowns, head cover, masks, gloves and goggles are worn by healthcare workers to reduce the transmission of microorganisms (germs) that could cause infection. Be sure to ask if healthcare workers, including the surgeons, wear protective apparel when performing sterile procedures.

Safe injection practices

In 2008 more than 60,000 people were notified of their risk of hepatitis C due to reuse of syringes at a Nevada endoscopy clinic. There have also been reports of reuse of finger stick devices and insulin injection devices meant for individual use. Reused syringes can transport tiny fragments of a patient's blood to the next medication vial, potentially infecting other patients. Syringes and needles must be used one time only. Before receiving an injection, ask if the needle and syringe have been newly opened for you. Inquire if the center uses single-dose vials of medication or multi-dose vials with strict controls. If they use multi-dose vials, ask if they unwrap a new syringe and needle for each dose of medication. If you will receive intravenous fluids, ask that they do not use the bag for other patients or set up the intravenous tubing until they are ready to administer to you.

Know your healthcare team

Ask who will perform the procedure and who will be providing the anesthesia services. Find out what their experience is in providing these services. You have every right to ask about the surgeon's infection rate and also inquire about the experience of the rest of staff at the facility. This is particularly important when services are being provided to children or seniors.

Post-procedure

Make sure you understand what to expect during recovery, both at the facility and at home. Ask who will be responsible for your care after you are discharged and who to contact with questions. If you have a wound, make sure you receive instructions for wound care. Contact your doctor right away if after you leave the center you develop one or more of the following symptoms of infection:

- the skin around your wound gets red and/or sore, or it feels hot and swollen
- your wound has a green or yellow colored discharge (pus)
- you feel generally unwell or feverish, or you have a temperature

In an emergency

While most procedures go smoothly, it is important to find out how the facility is prepared to handle a potential emergency. For instance, are personnel certified in CPR? Ask what would happen if you developed complications and required emergency care.

Licensing

Some states require ambulatory care facilities to have a license to perform certain procedures. Ask if the procedure you are having is required to be done at a licensed facility and if this center has such a license.

APIC's mission is to improve health and patient safety by reducing risks of infection and other adverse outcomes. The association's 12,000 members direct infection prevention programs that save lives and improve the bottom line for hospitals and other healthcare facilities around the globe. To promote a culture within healthcare where targeting zero healthcare-associated infections is fully embraced, APIC has created the "Targeting Zero" initiative to accelerate both learning and delivery of practical tools for infection preventionists. APIC advances its mission through education, research, collaboration, practice guidance, public policy and credentialing. Visit APIC online at www.apic.org.

Learn more

Pennsylvania Department of Health:

<http://www.dsf.health.state.pa.us/health/cwp/view.asp?a=188&q=241594>

Agency for Healthcare Research and Quality:

<http://www.ahrq.gov/CONSUMER/surgery/surgery6.htm>

One and Only Campaign:

<http://www.oneandonlycampaign.org/>

UK NHS Trust:

<http://www.wales.nhs.uk/sites3/page.cfm?orgid=79&pid=34146>

Centers for Disease Control and Prevention:

http://www.cdc.gov/drugresistance/healthcare/surgery/Tips_for_Surgery_Patients.pdf

World Health Organization:

http://www.who.int/patientsafety/safesurgery/ss_checklist/en/index.html

Association for Professionals in Infection Control and Epidemiology:

http://www.apic.org/Content/NavigationMenu/PracticeGuidance/Topics/PatientSafety/PatientSafetyAwarenessWeek/Patient_Safety_Aware.htm

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