Dear Champion,

The next letter will address two very important topics:

1. Healthcare Associated Infections (HAIs) and how to stop their transmission in the GI unit.
2. Isolation Precautions: the importance of following proper protocol to avoid the risk of cross-contamination.

Although GI endoscopy procedures are considered safe, the GI tract is recognized as a source of bacteria and pathogens. Adequate steps must be implemented during GI procedures to contain source bacteria at the initial point of contact. Staff members need to focus on infection prevention to identify and prevent opportunities for transmission within the endoscopy unit. If proper steps are not followed, we risk cross transmission to other patients, staff and visitors throughout a healthcare facility.

The CDC 2007 Guideline for Isolation Precautions: Preventing Transmission of Infectious Agents in Healthcare Settings provides us with best practices. Highlights of the guideline include:

- **Administrative Measures**: Healthcare organizations can demonstrate a commitment to preventing transmission of infectious agents by incorporating infection control into the objectives of the organization's patient and occupational safety programs.
- **Infection Control Nurse Liaison**: Designating a bedside nurse on a patient care unit as an infection control liaison is reported to be an effective adjunct to enhance infection control at the unit level.
- **Adherence of healthcare personnel to recommended guidelines**: Adherence to recommended infection control practices decreases transmission of infectious agents in healthcare setting.
Education of Healthcare Workers: Education and training of healthcare personnel are a prerequisite for ensuring that policies and procedures for Standard and Transmission-based Precautions are understood and practiced.

Hand Hygiene: Hand hygiene has been cited frequently as the single most important practice to reduce the transmission of infectious agents in healthcare settings and is an essential element of Standard Precautions. The term “hand hygiene” includes both hand washing with either plain or antiseptic-containing soap and water, and use of alcohol-based products (gels, rinses, foams) that do not require the use of water. In the absence of visible soiling of hands, approved alcohol-based products for hand disinfection are preferred over antimicrobial or plain soap and water because of their superior microbiocidal activity, reduced drying of the skin, and convenience.

Personal Protective Equipment for healthcare personnel: PPE refers to a variety of barriers and respirators used alone or in combination to protect mucous membranes, airways, skin and clothing from contact with infectious agents. (e.g., gloves, isolation gowns, masks, goggles and face shields). The selection of PPE is based on the nature of the patient interaction and/or the likely mode(s) of transmission.

Transport of patients: Notifying healthcare personnel in the receiving area of the impending arrival of the patient and of the precautions necessary to prevent transmission.

Environmental measures: The cleaning and disinfection of all patient-care areas is important for frequently touched surfaces, especially those closest to the patient, that are most likely to be contaminated (e.g., bedrails, bedside tables, commodes, doorknobs, sinks, surfaces and equipment in close proximity to the patient). EPA-registered disinfectants or detergents/disinfectants that best meet the overall needs of the healthcare facility for routine cleaning and disinfection should be selected. Certain pathogens, for example C. difficile, may be resistant to some routinely used hospital disinfectants. Some investigators have recommended the use of a 1:10 dilution of bleach and water for routine environmental disinfection of rooms of patients with C. difficile.

Patient care equipment and instruments/devices: Medical equipment and instruments/devices must be cleaned and maintained according to the manufacturers’ instructions to prevent patient-to-patient transmission of infectious agents. In all healthcare settings, providing patients who are on Transmission-based Precautions with dedicated noncritical medical equipment (e.g., stethoscope, blood pressure cuff, electronic thermometer) has been beneficial for preventing transmission. When this is not possible, disinfection after use is recommended.

The ASGE guidelines, Infection control during GI endoscopy and Guidelines for safety in the gastrointestinal endoscopy unit also detail ways to minimize the risk of transmission of infection within the endoscopy unit.

Isolation precautions that are otherwise indicated in patients who are potentially infected should be maintained when patients are transported to endoscopy units. For some patients, convenience or isolation requirements may require performance of an endoscopy at the bedside, rather than in the endoscopy unit.

Standard precautions, the minimum infection prevention practices applicable to all patient care regardless of the suspected or confirmed infection status of the patient, are the foundation of a sound infection prevention strategy. These include:

- Hand hygiene: Hand hygiene should be performed before patient contact (even if gloves are to be worn); after patient contact and before exiting the patient care area; after contact with blood, body fluids, or contaminated surfaces (even if gloves are worn); before performing invasive procedures (e.g., placement or access of intravascular lines); and after glove removal. The use of soap and water is required when hands are visibly soiled and after caring for patients with known or suspected infectious causes of diarrhea such as C. difficile. Otherwise, the use of alcohol-based hand agents is adequate.
- PPE: The risk exposure can be categorized into low-risk exposure and high-risk exposure. Low-risk exposure activities require no
PPE. They refer to personnel not in direct contact with a contaminated endoscope, device or bodily fluid or with the potential for splash contamination. High-risk exposure activities require the use of gloves and impervious gowns. Because of the potential for splash and OSHA and state-mandated recommendations, individual units should develop policies for wearing face and/or eye shields or masks for safety. They refer to personnel working in direct contact with a contaminated endoscope, device or bodily fluid. Staff must remove and appropriately discard used PPE before leaving the procedure room. PPE should not be reused or worn to care for more than one patient.

- Environmental cleaning: Follow the manufacturer's directions for surface disinfection of patient care items. Appropriate contact time of disinfectant to achieve germicidal kill should be followed. Alcohol should not be used to clean environmental surfaces. For patients with diarrhea or known *C. difficile* carriage, rigorous cleaning of the endoscopy suite with a bleach containing disinfectant (5000 ppm) for environmental disinfection is effective in killing the organism. The unit should have a terminal cleansing plan that includes methods and chemical agents for cleansing and disinfecting the procedural space at the end of the day. Agents for terminal cleaning should have efficacy in spore removal, which may differ from requirements for agents used in sterile operating rooms.

Following our professional societies' guidelines as described above can eliminate the transmission of infection in the GI unit. As staff members and patient advocates we must be aware of the proper protocol for patients on isolation precautions and continuously take all necessary steps to avoid Health Care Associated Infections (HAIs). Performing recommended infection prevention risk assessments is critical to the identification of steps along the continuum of care.

Requirements should either be emailed to Champions@sgna.org or faxed to 312-673-6694 as due. The the upcoming assignments are as follows:

1.  Continue to develop and implement infection prevention education for your peers (total of 120 minutes)
2.  Seek opportunities to educate yourself on infection prevention topics (total 180 minutes).

These bi-monthly letters will be archived for you to access as needed. As always, SGNA is available for any questions or difficulties you may have.

Sincerely,
The SGNA Infection Prevention Work Group

References:


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