retching. A patient who is coughing or retching vigorously sends out a spray of droplets from the mouth or the biopsy valve. The biopsy valve has been quoted as the most frequent source of splatter during endoscopy. The amount of fluid that escapes through the biopsy port may be the same even when a new cap is used.9 Newer models of endoscopes with the biopsy port lowered 30 cm below the eyepiece, and video endoscope, provide a false sense of security.

HIV seroconversion following exposure of intact mucosa or skin is very rare. It has been argued that the costs of universal precautions to prevent one HIV infection is very high.10 However, HIV is just one of numerous known and unknown infectious agents in blood or body fluids. The cost of universal precautions during endoscopy can be reduced considerably by simple measures. This would include retaining all protective items for the entire session, except gloves that need a change after each procedure; avoiding unnecessary endoscopy; scheduling patients so that the endoscopist does not shuttle in and out of the endoscopy room with frequent change of protective covering; and using minimum number of assistants. In our own set-up, we have estimated that these measures can reduce the cost of universal precautions to less than 50 rupees per procedure.

Acceptance by health care workers of methods for universal protection has been far from universal; a variety of explanations, or excuses, have been offered.9 It must be emphasized that all persons in the endoscopy room are at risk. In teaching hospitals, endoscopic procedures are often started by a trainee and later taken over by a senior who may not be wearing protective coverings. Our finding that assisted endoscopy carries the same risk of exposure highlights the need for all — nurses, technicians, interns, residents and teachers — to follow universal precautions.

In conclusion, our study reveals that exposure to potentially infectious body fluids occurs frequently during digestive endoscopy. This exposure is not eliminated by using video endoscopes or by avoiding instrumentation of the biopsy valve. Splashing of fluids also occurs on to those assisting or teaching endoscopy. We recommend that endoscopy room personnel must follow universal precautions.

References

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