The acquired immunodeficiency syndrome and human immunodeficiency virus have had a major impact on the practice of medicine in the past 2 decades. Medical professionals are once again faced with a lethal contagious disease that has been transmitted in the health care setting to both patients and providers. Because of the stigma and fear associated with the infection, civil rights legislation, such as the Americans With Disabilities Act, has been used to protect infected individuals from inappropriate discrimination based on unwarranted fears and public hysteria. Various courts, with the backing of organized medicine and the public health authorities, have made it clear that it is illegal for a physician to refuse to treat a patient based on the patient’s seropositivity. Unfortunately, various courts, with the backing of the American Medical Association and the Centers for Disease Control and Prevention, have made it clear that infected physicians are not necessarily afforded equal protection under the civil rights statutes.

The acquired immunodeficiency syndrome (AIDS) and human immunodeficiency virus (HIV) infection have been part of the medical reality for physicians for the past 2 decades. Unfortunately, despite recent advances in antiretroviral therapy and prolonged, and in many cases, long-term survival of patients with AIDS, infection with HIV is essentially uniformly fatal. The severe consequences of infection coupled with its blood-borne mode of transmission have caused health care professionals to focus on the risks of transmitting the infection in the health care setting. Given the invasive nature of surgery, surgeons in particular have paid special attention to this topic both by individual action and by policy statements of major societies.

Much of the early attention was focused on the risk of transmission of the virus from the HIV-infected patient to the physician and the physician’s duty to treat infected patients. In the post–Kimberly Bergalis climate, much of the attention has shifted to the transmission of the virus from the HIV-infected physician to the patient and the physician’s right to continue practicing. This article reviews both issues in light of the medical data, ethical and policy pronouncements, and the Americans With Disabilities Act, and concludes that infected patients have the right to be treated but that the rights of infected physicians are not necessarily afforded equal protection.

PATIENT-TO-PHYSICIAN TRANSMISSION

An entire generation of physicians trained and practiced during the “Pax Antibiotica,” a relatively unique period in time when physicians no longer were concerned about acquiring serious infections from their patients and even the risk of hepatitis B virus transmission was essentially ignored. This period ended with the widespread recognition in the early 1980s of AIDS and HIV infection. Physicians theoretically could acquire a lethal infection from treating patients. Within a few years, data emerged that the risk was not merely theoretical but actual and could be quantified. The Centers for Disease Control and Prevention (CDC) maintains a registry on probable occupational transmission of HIV, which includes more
The rate of seroconversion has been estimated to be 1 in nonsurgical physicians and other health care workers. Few of the cases involve surgeons; most of the cases are not occupational. Of note, very few of the cases are occupational. The rate of seroconversion has been estimated to be 1 in 330 needlesticks involving HIV-positive blood. More recent data indicate that the rate of seroconversion can be reduced even further by postexposure prophylaxis with antiretroviral drugs.

Physician response to this new threat varied from those who argued that patients were patients and that physicians had an obligation to assume some “reasonable” risk, to those who argued that physicians had the right to refuse to treat HIV-positive individuals. While overt public refusals to treat HIV-infected patients are relatively rare, covert discrimination is not. Anecdotal examples include consultants who routinely perform invasive diagnostic tests who decide that radiological studies are adequate for HIV-infected patients, and surgeons who decide that the surgery is no longer indicated when the HIV antibody test is positive. More troubling are surveys that indicated that many physicians, if given the choice, would not treat infected patients. Compounding the fear of contagion issue has been the societal stigma associated with HIV infection and AIDS, which has manifested itself in numerous ways including challenges to the public schooling of infected children and workplace and housing discrimination.

Initially, legal challenges to physician refusal to treat HIV-infected patients were curtailed by the standard in US case law of the “no duty rule.” Barring a preexisting relationship, no physician has a duty to treat any particular patient. This freedom of choice for physicians has been supported over the years by organized bodies of medicine including the American Medical Association (AMA) and the American College of Physicians. In response to the absence of legal imperatives to compel treating infected individuals, much of the discussion of physicians treating infected patients centers on ethical arguments.

Many commentators including physicians, lawyers, ethicists, and philosophers have provided several compelling arguments for an individual physician duty to treat infected patients based on virtue theory and professional arguments. One of the strongest arguments is that it is a professional obligation akin to firefighters and police officers who must accept some risk as a part of the profession but who have no obligation to take unreasonable risk.

Organized bodies of medicine entered the debate to codify the ethical arguments. Such policy statements are important for 2 reasons. They represent to the lay public a consensus of organized medicine. Additionally, as noted herein, the courts often turn to such pronouncements to establish the standard of care. Since 1988, the AMA, through its Council on Ethical and Judicial Affairs, has concluded that: Act applies to nearly all hospitals because they receive federal funds, but it does not apply to individual physicians.

The linkage of such legislation to HIV infection was established in the early 1980s with several courts and state administrative agencies suggesting that a contagious disease such as AIDS should be considered a disability. The question was essentially settled by the US Supreme Court in the 1987 Arline decision, which concluded that a contagious disease, tuberculosis, was a handicap and that fear of contagion alone could qualify as a handicap under section 504. The Court did limit the protections afforded to infectious individuals by noting that a “significant risk” of transmitting the disease would make the person not otherwise qualified. The determination of “significant risk” was left to the “reasonable medical judgments of public health officials.”

The passage of the Americans With Disabilities Act of 1990 further extended civil rights protections to disabled individuals. The intent of the Act, as noted by President Bush, was to eliminate discrimination against the disabled in “all aspects of American life.” Title III of the Act notes that:

No individual shall be discriminated against on the basis of disability in the full and equal enjoyment of the goods, services, facilities, privileges, advantages, or accommodations of any place of public accommodation.

As opposed to previous civil rights legislation, Congress intentionally included individual physicians under the Act by specifically including as a public accommodation the “professional office of a health care provider, hospital, or other similar service establishment.”

Since the passage of the Act, several court decisions have established a duty on the part of individual health care providers to treat patients with HIV/AIDS.
practitioners to not discriminate on the basis of infection with HIV and AIDS. In a recent case involving a dentist, the Supreme Court found that asymptomatic HIV infection alone was sufficient to trigger Americans With Disabilities Act protection for the patient. Thus, a surgeon refusing to treat an infected patient, on the basis of the fear of disease transmission, could be subject to an injunction or significant civil penalties under an action brought by either the patient or the US Attorney General.

The duty created under the Americans With Disabilities Act is not unlimited. Paralleling the language of the above-cited Arline decision, the Act carves out an exception when the “. . . individual poses a direct threat to the health and safety of others. The term ‘direct threat’ means a significant risk to the health and safety of others that cannot be eliminated by a modification of policies, practices, or procedures or by the provision of auxiliary aids or services.” However, the above-noted public positions of the AMA and the American College of Surgeons, among others, that the risk of patient-to-physician transmission while using universal precautions, although real, is not significant, essentially eliminate this exception as a defense to not treating infected individuals.

**PHYSICIAN-TO-PATIENT TRANSMISSION**

While much of the initial attention was focused on patient-to-provider transmission of the virus, several commentators noted that blood-borne operative risks are a 2-way street and that surgeons frequently cut themselves during invasive procedures and thus could infect their patients. Much of the data came from reports of clusters of hepatitis transmission from infected surgeons to patients. Arguments were made for infected physicians to relinquish their practice of “seriously invasive procedures.” The AMA went even further when it issued a 1988 opinion of the Council on Ethical and Judicial Affairs states that

in the special context of the provision of medical care, the Council believes that if a risk of transmission of an infectious disease from a physician to a patient exists, disclosure of that risk to patients is not enough; patients are entitled to expect that their physicians will not increase their exposure to the risk of contracting an infectious disease, even minimally . . . if a risk does exist, the physician should not engage in that activity.

The relatively polite theoretical debate exploded in 1990 with the revelation that a Florida dentist, David Acer, may have infected 6 of his patients. One patient in particular, Kimberly Bergalis, launched a very public and emotional campaign, including testimony in Congress, to limit the practices of infected physicians. The public clearly supported such calls with polls indicating that a majority believed that infected physicians should not be allowed to practice. The Senate passed a bill criminalizing the practice of medicine by infected physicians, which included significant fines and jail sentences of up to 10 years. The legislation was ultimately defeated in the House of Representatives.

In response to the public outcry, the CDC abandoned the policy that universal precautions were sufficient to protect patients and providers and issued new guide-

lines in July 1991, which established the concept of “exposure-prone” procedures and recommended that HIV-infected physicians should not perform such procedures. The AMA again called for the limitation of practice and essentially a “zero-risk” threshold. The AMA stated that “physicians who are HIV positive have an ethical obligation not to engage in any professional activity which has an identifiable risk of transmission of the infection to the patient.” The American Academy of Orthopaedic Surgeons recommended that infected surgeons should not perform certain procedures. The American College of Surgeons took a different position. The College noted that HIV-infected surgeons may continue to practice and perform invasive procedures unless there is clear evidence that a significant risk of transmission of infection exists through an inability to meet basic infection control procedures or unless the surgeon is functionally unable to care for patients.

This position was reaffirmed in 1998 after the discovery of a probable case of orthopedic surgeon to patient transmission in France.

Despite the public attention and fear, the data actually indicate that the risk of transmission from physician to patient is smaller, possibly significantly smaller, than the risk of transmission from patient to physician. The CDC has created a mathematical model estimating the risk of provider-to-patient transmission at between 1:42 000 and 1:420 000 per procedure. A CDC registry of patients operated on by infected surgeons has not found any confirmed cases of physician-to-patient transmission in more than 22 000 cases. One case of physician-to-patient transmission has recently been reported involving an orthopedic surgeon in France who apparently infected one patient during a hip surgery. In addition to being exceedingly rare in current practices, suggestions have been offered to further reduce the likelihood of intraoperative infection.

In theory, at least, it would appear that the Americans With Disabilities Act and the Rehabilitation Act should protect infected physicians from discriminatory actions based on their HIV positivity. According to public health authorities and various bodies of organized medicine, the risk of occupationally acquired seroconversion is not a significant enough risk to constitute a “direct threat” and therefore civil rights laws prohibit discrimination against an infected patient. However, it appears that despite the goal of the Americans With Disabilities Act to eliminate discrimination in all spheres of American life, similar treatment is not afforded to infected physicians in that a number of courts have ignored the “significant risk” standard and have imposed instead a standard intolerant of any risk.

In recent years, a number of lawsuits have been filed alleging patients have been harmed by the emotional distress of finding out that they have been operated on by an infected physician. In several of the cases, individual physicians and health care institutions have been held liable for damages if an infected surgeon operates, even if there is no transmission of the virus. In an often-cited case, *Faya v Almaraz*, patients who tested negative for HIV were allowed to recover monetary damages for the emotional distress of waiting for the results of an HIV test.

In response to the public outcry and the fear of li-
Present recommendations unsubstantiated by scientific data have created an unhealthy atmosphere of doubt in the minds of patients and the public regarding the problems of HIV transmission. Any regulatory efforts by concerned bodies should be based solely on documented scientific data, not on unfounded hysteria.28

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