January 2, 1999

To the Editor:

I was pleased to see that Dr. Yeo and colleagues give 5-year actual survival rates in their paper, “Periampullary adenocarcinoma: analysis of 5-year survivors,” and acknowledge that 5-year survival is rarely a cure.

I am also pleased to see that they acknowledge that they have published on the same time period and thereby the same patients several times before, although a little bit more often that they reveal in their paper, as indicated in Figure 1.

What surprises me is the different number of survivors in the various papers. In an earlier paper, they report on the years from 1970 to 1994 and reveal 11 5-year survivors from that period. Their recent paper deals with the period from 1970 to 1992 and now they find 22 survivors. May the readers have an explanation?

BIRGIR GUDJONSSON MD, FACP, FRCP
The Medical Clinic
Reykjavik, Iceland

March 29, 1999

Authors’ Reply:

We are pleased to see that Dr. Gudjonsson continues to be interested in our work. The purpose of our paper on analysis of 5-year survivors of periampullary adenocarcinoma was to provide actual 5-year survivor data (not Kaplan-Meier statistical survivors) for patients with pancreatic, distal common bile duct, ampullary, and duodenal tumors. We note in our paper that the 5-year actual survival for pancreatic adenocarcinoma is 15%, with 5-year actual survival rates for bile duct cancer, ampullary cancer, and duodenal adenocarcinoma being 27%, 39%, and 59%, respectively.

Dr. Gudjonsson questions an apparent discrepancy between the 11 5-year survivors reported in our 1995 paper on pancreaticoduodenectomy for cancer of the head of the pancreas and the 22 5-year survivors with pancreatic cancer that we have reported in the 1998 publication. The explanation is quite simple. For the earlier paper, 11 5-year survivors were identified with follow-up ending in April 1994. The 11 subsequent 5-year survivors were added because the follow-up in the second paper extended to May 1997. Thus, the second paper includes an additional 37 months of follow-up, and during that 37 months of follow-up, 11 additional patients became 5-year survivors. Additionally, with continued follow-up since May 1997, seven additional patients have become 5-year survivors, giving us a total of 29 5-year survivors with resected pancreatic adenocarcinoma!

We thank the Editorial Board for the opportunity to respond.

References

To the Editor:

We read with great interest the article by Patterson et al., which dealt with surgeons’ risk awareness and behavioral methods of protection against bloodborne pathogen transmission during surgery.

This large and well-conducted survey highlights the fact that most surgeons underestimate the risk of bloodborne pathogens and that the actual incidence of exposure to needle-stick injury and puncture wounds is much higher than usually thought. The article focused on two important protection strategies, i.e., vaccination and double-gloving. The former, at present available against the hepatitis B virus, is still not used by all surgeons, and it does not protect against the hepatitis C and human immunodeficiency viruses. Double-gloving is presently used only by 12% of surgeons, although Quebbeman et al. have shown that the risk of blood contamination for surgeons’ hands can be significantly reduced by seven- to eightfold with double-gloving without impairment of tactile sensation. They reported an equal number of needle-stick injuries wearing one pair of gloves or two, however, so double-gloving seems ineffective in protecting the surgeon if unavoidable injuries occur, and their use could dramatically increase the cost of medical care.

The most common exposure to patient’s blood is from needle-stick injury. Its incidence varies from 5.3% to 12.8% and depends on several factors, such as surgical specialty (there is greater risk in gynecologic, cardiothoracic, trauma, general, and vascular procedures), role of the individual (greater risk for the surgeon and first assistant), duration of operation, number of needles used, and surgeon experience. Reading the article of Patterson and colleagues, we were surprised that they did not mention an important protection strategy against needle-stick injuries, i.e., the round-tipped blunt needle (BN).

Because needle-stick injuries occur during suturing, especially celiotomy closure, the use of BN could reduce the risk of percutaneous injuries and glove perforation and the subsequent contact between exposed skin and patient blood. During celiotomy closure, which requires a great effort by the needleholder to pass the needle through muscles and fascia, the needle tip is often hidden from the direct vision of the surgeon, especially if excessive adipose tissue is present. Furthermore, the surgeon may have decreased attention, being at the end of a surgical procedure. This is, in fact, a common part of the operation, but one that probably does not get quite the detailed attention that it deserves. In an our study, we prospectively determined the incidence of glove perforation in emergency abdominal procedures and the efficacy of BN in increasing safety for the surgeon. Sharp needles (SN) were responsible for all injuries and for the majority of glove perforations. The risk of glove perforation was fifteenfold greater if sharp needles are used. Furthermore, the use of blunt needles does not represent an additional increase in medical expense, as does double-gloving, because its cost is equal to that of a sharp needle.

In conclusion, we would emphasize the most effective methods to limit surgeon exposure to patient blood are those surgeons can take herself. In fact, vaccination against hepatitis B, the recognition that celiotomy closure is a high-risk portion of the operation for blood contamination, the adoption of a hands-off technique, and the use of BN and double-gloving are the most effective modalities to prevent needle-stick injuries and contamination and should always be used to increase the safety for surgeons.

Andrea Mingoli MD
Paolo Sapienza MD
Giovanna Sgarzini MD
Claudio Modini MD
First Department of Surgery
University of Rome “La Sapienza”
Rome, Italy

References


March 18, 1999

Authors’ Reply:

We would like to thank Drs. Mingoli, Sapienza, Sgarzini, and Modini for their letter regarding our paper. The purpose of our study was to evaluate surgeons’ concern regarding behavioral methods of protection and risk awareness against bloodborne pathogen transmission. The results of our study lead us to conclude that most surgeons underestimate their risk of conversion after exposure to a bloodborne pathogen. We believe that all surgeons...
should take the maximum precautions to protect against exposure to these pathogens, including attention to surgical technique. We recognize that the use of blunt needles may reduce the risk of percutaneous injuries; however, in many surgical procedures it is not technically feasible to use a blunt needle. Therefore we continue to advocate awareness of sharp instruments in the surgical field and the use of instruments for suturing and passing needles rather than a hands-on technique. The use of a standard technique that puts fewer hands in the surgical field will decrease the chance of a percutaneous injury, regardless of whether a sharp- or blunt-tipped needle is used.

We thank Drs. Mingoli, Sapienza, Sgarzini, and Modini for directing the readership’s attention to another protection strategy.

Reference