Postoperative Infection Surveillance

Now that economic and social pressures have made outpatient surgery attractive and practical, it is not surprising that certain gynecologic cases make up a large part of the schedule. The so-called “minor gyn” procedures consisting largely of dilatation and curettage, pregnancy termination and laparoscopy are followed by infection in only 1% to 2% of cases and the patients are often young and healthy.

Garvey and colleagues have surveyed postoperative infections among 1,200 patients undergoing outpatient gynecologic surgery. Their main objectives were to: 1) determine postoperative infection rates after various outpatient procedures; 2) compare infection rates after procedures performed in a traditional operating room versus a physically separate surgicenter; and 3) determine whether there would be cooperation among surgeons in a voluntary self-reporting system.

Several shortcomings are present in their method. First, there were no standard definitions of infection, but rather “the definition of infection was left to the individual physician.” Second, if a physician acknowledged a postoperative infection, then he was subjected to the further penalty of sorts by having to report details of the infection and treatment.

It is well known that surgeons are not objective observers of postoperative infection in their own cases. Among 12,000 patients undergoing hysterectomy, postoperative fever developed in 33%; cultures were obtained in 27% and antibiotics were used in 48%. Yet only 5% of cases were coded as developing infection. Thus, it is likely that the surveillance system used in this article results in under-reporting of the true infection rate. However, the present study reports an excellent rate of compliance among attending gynecologists and no under-reporting of infections requiring readmission. Moreover, frequent, direct patient examination in the postoperative period by a disinterested nurse or physician would indeed have been expensive and impractical.

A third problem is the use of sequential, rather than concurrent, periods for collection of data from the traditional operating room and the surgicenter. Seasonal variations in infections, for example, may potentially bias the results. The authors found, however, few infections overall and no more than two infections in any one month.

There are noteworthy strengths of this work. It encompasses a large number of cases which were performed over a short period of five and one half months. The cases were nearly equally distributed between the two operating room sites, and the surgeons were the same. The authors were dogged in pursuit of the surgeons’ reports, resulting in follow-up information for nearly 99% of cases. Finally, the surveillance methods were the same for both operating room sites.

Thus, Garvey and colleagues demonstrate a workable surveillance system. They present a convincing case that outpatient gynecologic procedures performed in a separate surgicenter are accompanied by a similar postoperative infection rate as cases performed on an outpatient basis in a traditional operating room. Their second conclusion regarding the risk of infection after outpatient procedures is most likely also correct. Yet limitations of design of the study probably result in under-reporting of minor infections and make comparison of rates with other studies difficult. Nevertheless, the results of this study are welcome and reassuring in view of the other advantages of outpatient gynecologic surgery. The model also demonstrates that with a dedicated infection control team and a well-motivated staff, a surveillance system can be established.

REFERENCES

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