To the Editor.—We read with much interest the article by Biki et al. regarding the effect of anesthetic technique and postoperative analgesia on the cancer recurrence rate after open radical prostatectomy. The results suggesting that epidural analgesia/analgiesa lowers the rate of recurrence are certainly intriguing; however, we are concerned with the lack of detailed information presented in various parts of this retrospective study. Not only does this diminish the quality of the publication, but it also raises questions about the validity of the results. Most areas where detailed information is omitted are located within the Materials and Methods section. The primary rationale for presenting methodology in any scientific publication is to allow the reader to determine the applicability of the study conditions to their own circumstances/practice and/or to replicate the study if desired. As such, meticulous and accurate reporting of details is essential. This may be particularly relevant for retrospective studies, as the most appropriate use of such studies is to generate hypotheses for the development of future clinical trials, the design of which will depend to a large extent on the methods used in the retrospective study.

The most important example of incomplete information relates to the epidural anesthetic/analgiesa. There is an almost complete lack of information regarding the intraoperative and postoperative epidural management, and, most significantly, the type and quantity of local anesthetic are mentioned nowhere. Certainly, “not all epidurals are created equal,” and knowing the type and quantity of medication administered via this route is of major relevance from both a research and clinical perspective. The authors also fail to provide data regarding the quantity of potent inhalational anesthetics or opioids actually administered in the perioperative period. Both types of agents inhibit natural killer cell activity, and may thus potentially increase the risk of cancer recurrence after surgery. Although the authors state in the Discussion section that “it is highly plausible that patients in the epidural group . . . required considerably less volatile anesthetic” and those receiving epidural anesthesia/analgiesa “presumably required little opioid, whereas those given general anesthesia alone surely required considerable amounts of opioid,” they present no data to support these statements. Indeed, when the authors describe the general anesthetic as “most typically” consisting of a list of drugs, volatile anesthetics are not even included. Slightly more information is presented for opioids (fentanyl 1–2 μg/kg is included in the list of “most typically” used intraoperative drugs; morphine 0.1–0.15 mg/kg is merely reported as having been “given for postoperative pain,” and the postoperative morphine patient-controlled anesthesia settings are stated for the general anesthesia–postoperative opioid group), but the quantity actually received by patients in the two groups is not reported. One further example of incomplete methodological information is not only deficient, but also inaccurate. The term “sizable minority” is used to describe the percentage of patients who received general anesthesia–postoperative opioids; however, this contradicts the actual numbers of patients in each group: 123 patients received general anesthesia–postoperative opioids whereas 102 received epidural anesthesia/analgiesa. No explanation is given for this discrepancy.

The above discussion leads to a more general issue: The standard of reporting expected for retrospective studies. Although some information may not be available, every attempt must be made to achieve the same standard of rigorous reporting as for clinical trials and laboratory investigations. Indeed, with the inherent drawbacks of retrospective studies, one could argue that the presentation of the information that is available should reach an even higher standard than that used for other types of scientific articles. Furthermore, if important data are not available, this calls into question whether the study should even be performed, as its validity may be suspect. As computerized record-keeping and databases are increasingly used, it is quite possible that retrospective studies will become more and more common. To provide meaningful information, these studies should strive to achieve the same high standards expected of other scientific publications.

M. Denise Daley, M.D., Peter H. Norman, M.D.* *University of Texas M. D. Anderson Cancer Center, Houston, Texas. phnorman@mdanderson.org

References
2. Markovic SN, Knight PR, Murasko DM: Inhibition of interferon stimulation of natural killer cell activity in mice anesthetized with halothane or isoflurane. ANESTHESIOLOGY 1993; 79:700–6

(Accepted for publication December 3, 2008.)
algesia for breast cancer and epidural analgesia for colon cancer. Others will start soon.


References

2. Exadaktylos AK, Buggy DJ, Moriarty DC, Mascha E, Sessler DI: Can anesthetic technique for primary breast cancer surgery affect recurrence or metasta-
sis? ANESTHESIOLOGY 2006; 104:600–4

Surgical Demand Time Variance: A Possible Explanation for Lunar Effects and Some Other Mysterious Cycles

To the Editor:—In response to Moore et al. “Observations on Surgical Demand Time Series: Detection and Resolution of Holiday Variance,” September 2008, it is worthwhile to speculate on the origin of some of the highly significant nontrivial cycles of surgical demand time that were detected in the authors’ frequency analysis and that were not attributable to statutory holidays or other “trivial explanations.”

I would propose the possibility that at least two of the highly significant nonlinear variances are readily attributable to the cycle of Jewish holidays not accounted for in the authors’ United States statutory holiday variance model. The 28.09-day cycle which the authors may rightly ascribe to possible “lunar effects” perhaps reflects the Jewish lunar calendar during which the three major festivals of Sukkoth, Passover, and Shavuot each occur at the full moon of their respective lunar months, and during which observant Jews refrain from most forms of non-life-saving work. Moreover, the 8.08-day cycle may reflect the power of a single 8-day cycle occurring during the Jewish high holidays between the second day of Rosh Hashanah and Yom Kippur. Again, observant Jews would refrain from work, including nonemergent surgeries, during these days.

Lending credence to this theory is the subjectively notable bump in variance in figure 7 that occurs after Labor Day and before Columbus Day during the period of the Jewish high holidays. Although the authors do not specify which major academic institution was the source of their data, the possibility of its coming from the University of Pennsylvania, home to one of the study authors as well as a large population of observant Jews, may lend further credence to my suggestion.

It would be interesting to see how accounting for some widely observed nonstatutory United States holidays such as the Jewish holidays mentioned above may have affected the authors’ analysis. Of course, the data itself will ultimately determine the importance such holidays might have held in the analysis of the authors. If the above explanation were validated, it might perhaps lead to improved models for predicting surgical demand.

Robert B. Schonberger, M.D., M.A., Yale University School of Medicine, Department of Anesthesiology. robert.schonberger@yale.edu

Reference


In Reply:—The authors are grateful to Dr. Schonberger for his thoughtful comments with respect to our recent manuscript entitled “Observations on Surgical Demand Time Series: Detection and Resolution of Holiday Variance.”

Dr. Schonberger’s speculations regarding the Jewish lunar calendar are astute, and we believe they may have merit. We are investigating these nontrivial cycles of surgical demand further and hope to determine a definitive answer in the near future.

Robert C. Moore, Ph.D., David Thomson, M.D.,* Ian Moore, Ph.D., David Thomson, Ph.D. “Hospital University of Pennsylvania, Philadelphia, Pennsylvania. strumdp@uphs.upenn.edu

Reference


Downloaded From: http://anesthesiology.pubs.asahq.org/pdfaccess.ashx?url=/data/journals/jasa/931084/ on 10/16/2018