Sleepy Attending Docs = More OR Complications

BY MARY ANN MOON

Complication rates for elective surgical procedures were significantly higher when the attending physicians got less than 6 hours of sleep because of working during the previous night, according to a report in JAMA.

There was not a significantly increased rate of complications in the labor and delivery suite under the same conditions, but larger studies are needed in this setting, said Dr. Jeffrey M. Rothschild of Brigham and Women's Hospital, Boston, and his associates (JAMA 2009;302: 1565-72).

"These data suggest that attending physicians, like residents and nurses, may be at increased risk of making errors when sleep deprived or working extended shifts," the investigators noted. "The business as usual of a 'limitless workweek' for attending physicians is not optimal for patient care."

The 2008 Institute of Medicine report on residents' working hours, which led to restrictions on those hours, "did not comment on attending physician work hour limitations," and it has not been clear whether older and more experienced attending physicians are more or less able to cope with the physiological effects of fatigue than are residents.

Dr. Rothschild and his colleagues studied the complication rates of 86 attending surgeons and 134 attending ob.gyns. for 1,876 elective procedures they performed after being on duty the previous night. They compared these with complication rates of the same physicians for 7,497 similar control procedures they performed after being off duty the previous night.

Overall, the procedures performed the day after nighttime duty were not associated with significantly increased complication rates, compared with control procedures, the investigators said.

However, there was wide variation in the duration of sleep attending physicians were able to get during on-duty nights. When these data were analyzed further, surgical but not ob.gyn. postnighttime cases after 6 hours or less of sleep showed a substantially elevated rate of complications (6.2%), compared with cases in which sleep exceeded 6 hours (3.4%), they noted.

Surgical but not ob.gyn. cases involving attending physicians who'd had 6 hours or less of sleep the night before showed a higher complication rate than when sleep exceeded 6 hours.

This difference was primarily a result of a higher complication rate in the operating room (8.5%) than in the labor and delivery suite (3.4%) on the day following nighttime duty with less than 6 hours of sleep.

Moreover, the risk of complications was higher, though not significantly so, for both surgery and ob.gyn. attending physicians who had just completed shifts of 12 hours or more, compared with when they had completed shifts of less than 12 hours.

Thus, both limited sleep and longer work shifts predicted higher complication rates, Dr. Rothschild and his associates said.

Several initiatives could counteract the risks of unsafe levels of fatigue during attending physicians' procedures.

"Large physician groups can avoid scheduling elective procedures following overnight on-call responsibilities or use hospital-based clinicians, such as obstetrical 'laborists' and surgical hospitalists, to cover nighttime emergencies. …

"When possible, adequate backup personnel should be available to relieve physicians who detect impaired performance due to severe fatigue in themselves and others," the investigators said.

In addition, "attending physicians should consider canceling or postponing elective procedures if they are not alert enough to safely operate," they said.

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