Sex differences in speed of emergence and quality of recovery after anaesthesia: cohort study
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Recent evidence shows that postoperative recovery may differ between men and women. We planned a prospective cohort study to examine the impact of gender on postoperative outcome. This was associated with a trial investigating the effectiveness of several anaesthetic regimens.

Participants, methods, and results
After obtaining ethics committee approval and informed consent, we studied 463 adult patients undergoing elective inpatient surgery. An observer experienced in postoperative review followed up all patients daily until the third postoperative day. The primary end point was quality of recovery, as measured by a quality of recovery score consisting of nine (range 0–18) items. Secondary end points included recovery times and the incidence of complications (postoperative nausea and vomiting, headache, backache, and sore throat).

Data were analysed using t tests or generalised linear models (to adjust for the covariates of patients’ age, American Society of Anesthesiologists status, and extent and duration of surgery). Associations were described using $\chi^2$, risk ratios, and 95% confidence intervals. Cox proportional hazards was used to adjust for the covariates to identify the effect of gender on the pattern of recovery.

The men (n = 241) and women (n = 222) in our study were similar in terms of age, American Society of Anesthesiologists physical status, and type, duration, and extent of surgery. Women were more likely to have a history of postoperative nausea and vomiting (41% (19%) women v 18 (7.4%) men, P < 0.001) and to have received prophylactic antiemetic agents (102 (46%) women v 70 (29%) men, P < 0.001).

Women emerged significantly more quickly than men (table), and overall quality of recovery was worse (quality of recovery score averaged over time: women 15.7 (95% confidence interval 15.6 to 16.0); men 16.3 (16.2 to 16.5); P = 0.024). Women had a slower return to baseline health status, as determined by their quality of recovery score (hazard ratio 0.75 (0.59 to 0.95), P = 0.005), and were more likely to have postoperative complications (table). All these findings were similar when analysed separately for each anaesthetic regimen and type of surgery (results not shown).

Comment
We found that women emerged more quickly than men from general anaesthesia but had a 25% slower rate of return to their preoperative health status. They
also reported complications more often than did men. These complications are traditionally termed “minor” but are common after surgery, and more rapid emergence may not translate to earlier discharge from the recovery room if the patient’s condition has to be stabilised. This may explain the lack of difference between groups for eligibility for discharge from the recovery room.

Underlying physiological differences partly account for variation in the effects of anaesthesia. Sex hormones can cause functional changes in the γ-aminobutyric acid receptor, the site of action of most intravenous anaesthetic drugs. Our study confirms that women emerge faster when propofol has been used, and it extends the findings to include anaesthesia with volatile agents such as isoflurane and sevoflurane. Postoperative nausea and vomiting in women has been related to the phase of the menstrual cycle, and women have a higher incidence of migraine and tension headaches generally (a risk factor for postoperative headache). Postoperative backache may be attributed to immobility of the lumbar spine during surgery, and there are anatomical differences between men and women.

The higher incidence of some complications among women may be attributable to greater willingness to report them. However, participants in this study were directly questioned about nausea, headache, and tension headaches generally (a risk factor for postoperative headache). Postoperative backache may be attributed to immobility of the lumbar spine during surgery, and there are anatomical differences between men and women.

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A memorable patient
Clinical and communication skills conquer all

I had just started as a casualty officer in a rural part of England. My next patient was an 11 year old boy with a fishing hook in his finger. As I drew back the curtains and entered the cubicle, the child and his parents were slightly taken aback by my appearance. It was probably the first time that they were so close to a brown person. I am an Irish born UK graduate of Indian descent, but my skullcap and beard probably made me look like an Afghan rebel or a rabbi.

After the introductions were over, I turned my attention to John. He was a bit small for his age and I had to kneel down to examine his finger properly. He was not squeamish about his “harpooned” finger, though, and he proudly showed it off to me. I explained to him—and his parents—that because of the barb on the hook, I would have to push it all the way through his finger to get it out. I also explained that I would have to numb the finger by using a ring block.

While mum was a bit apprehensive about the whole thing, dad had seen it all before, and he nodded his head in agreement. I turned back to John to gauge his reaction. His eyes were open wide, and his jaw had dropped. He stared at me for a few seconds and then swallowed nervously. Finally he plucked up courage and said gravely: “I trust you, you’re a doctor.”

I was both surprised and relieved. His magic words had made my day. Although I had only seen it once before, the ring block worked well, and the hook was soon out. Undoubtedly, my success was due to John’s cooperative and trusting attitude.

Whenever I’m feeling low, I think of John’s magic words “I trust you, you’re a doctor.”

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We welcome articles of up to 600 words on topics such as A memorable patient, A paper that changed my practice, My most unfortunate mistake, or any other piece conveying instruction, pathos, or humour. If possible the article should be supplied on a disk. Permission is needed from the patient or a relative if an identifiable patient is referred to. We also welcome contributions for “Endpieces,” consisting of quotations of up to 80 words (but most are considerably shorter) from any source, ancient or modern, which have appealed to the reader.