was defined as a systolic arterial pressure of <100 mm Hg. If this occurred, it was treated with i.v. ephedrine. The overall hypotension rate was 41% (137/331). The rate was twice as high for patients not in labour (61%) (61/100) than those in labour (33%) (76/231) (P<0.05). The hypotension rate for patients receiving epidural anaesthesia (39%) (97/247) was not significantly different from those receiving spinal anaesthesia (48%) (40/84) (P>0.05). The mean weight of the patients was 80 kg. Thirty-eight of the 331 patients weighed more than 100 kg. The mean volume of fluid administered before the block took effect was 2453 ml.

Since the genesis of the study was to investigate whether ruptured membranes played a part in hypotension, thus reducing caval compression, patients in labour were further evaluated. Of the 231 patients in labour, 179 had ruptured membranes and 52 did not. The hypotension rate for those in labour with ruptured membranes was 32% (57/179). The hypotension rate for those in labour, with intact membranes, was 38% (20/52) (P>0.05). Thus, it appears that ruptured membranes and decreased uterine volume play little or no part in explaining why patients in labour are less likely to become hypotensive. The autotransfusion hypothesis appears to be the most likely explanation.

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## Low-cost cardioversion

Editor—In addition to more sophisticated and expensive procedures, I thought useful to report here a simple, cheap, and safe means to effectively terminate a rapid atrial fibrillation (AF).

A 57-yr-old man was undergoing an electrical cardioversion of recurrent rapid AF, with an onset <24 h. He had three previous electrical cardioversions in the past and was on oral anticoagulant therapy. After evaluation by the anaesthetist in charge, a short general anaesthetic with face mask oxygenation was decided on. However, on the way to the intervention room, the anaesthetist missed the wide entrance and hit the door frame heavily with the bed. Before he had time to apologize, he was warmly congratulated by the patient. An ECG confirmed the regular sinus rhythm.

Instead of an electrical cardioversion under general anesthesia, the patient got an awake mechanical cardioversion. Using the kinetic energy formula ( $E=1/2 \text{ mV}^2$ ) and considering a total mass of 200 kg (bed and patient) and a speed of 1 m s<sup>-1</sup>, the total energy is estimated to 100 J. As a non-elastic shock, half is absorbed by the wall, one-quarter by the bed, and one-quarter by the patient, that is to say 25 J. This energy corresponds approximately to the one produced by the precordial thump, indicated for witnessed ventricular fibrillation. In our case, the energy was indirectly transmitted to the patient, avoiding a direct shock.

In 1988, McKnight and colleagues<sup>1</sup> reported several ingenious methods developed by a farmer to stop his supraventricular tachycardia: jumping off a ladder or in a cold water tank, firing a 12 bore shotgun, or grasping a 6 V electric cattle fence. Those techniques are unfortunately not suitable for in-hospital use. Of course, propelling patients against a wall is a little extreme for standard medical teaching, but you may consider this next time you are faced with an unstable patient who you are hesitant to put asleep for an electrical cardioversion!

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## Effects of inhalation anaesthetics on human sperm motility and vitality *in vitro*

Editor—In recent years, inhalation anaesthetics have been found to have affected human reproduction<sup>1</sup> and have genotoxicity in human,<sup>2</sup> but these studies have concentrated on the effects of chronic exposure to halogenated anaesthetics. Whether a short exposure to halogenated anaesthetics can cause a tissue or organic hazards is still unknown. We have assessed the effect of short exposure to isoflurane on human sperm.