

AIR tent for airway management of SARS patients

To the Editor:

The suspected culprit, a coronavirus, of the severe acute respiratory syndrome (SARS) is believed to spread mainly by droplets.¹ Positive airway pressure generated during coughing, tracheal intubation and extubation, and during assisted ventilation may facilitate the dispersion of droplets from infected patients.

We developed the airway intervention and resuscitation tent (AIR tent) to provide an extra layer of barrier between the patient and health care workers (Figure). The "tent" is an assembly of a clear transparent plastic bag mounted on a plastic frame. The anesthesiologist can use the gloves on the cephalic side of the tent while an extra glove on the caudal side can be used by the assistant to provide cricoid pressure and pass instruments. An airtight seal around the glove is produced by screwing two plastic rings over the plastic sheet with the glove first mounted on the inner ring. The inner and outer rings are cut from the top and the lid of a plastic container respectively. A rubber seal, fashioned from a feeding bottle tit and fixed by an adhesive dressing at the top of the tent, provides a conduit for bronchoscopy. The plastic frame and rings can be disinfected with sodium hypochlorite solution. Other parts are disposable. The AIR Tent is inexpensive to construct (plastic frame: US\$ 15; gloves + plastic bag: US\$ 1.5) and is easy to put together (setting-up time < 5 minutes). We believe the AIR Tent is suitable for use in operating rooms and other parts of the hospital where resuscitation takes place.



FIGURE AIR tent covering the head and the upper part of the chest of a manikin on an operating table.

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Reference

- 1 Li TS, Buckley TA, Yap FH, Sung JJ, Joynt GM. Severe acute respiratory syndrome (SARS): infection control (Letter). *Lancet* 2003; 361: 1386.

Programming errors from patient-controlled analgesia

To the Editor:

Vicente *et al.* recommend hospital-operating procedures to minimize programming errors associated with patient-controlled analgesia (PCA) and to enhance their detection before patients are harmed.¹ Most of the preventable incidents in anesthesia, however, involve human error.² Anesthesiologists are frequently exposed to stress, operating under difficult and sometimes critical conditions including emergency situations.^{3,4} This requests a high ability to work under pressure. Stress is well known to occupy thought processes and decrease alertness. Drugs and alcohol (and hangover) can impair judgment, even in minor doses. Physical and mental strain, lack of sleep and immobility may cause lasting degradation of performance. Even minor illness can affect alertness. In addition, coordination and vision may be impaired by medication. Fatigue favours the acceptance of unwarranted risks. Emotional upset, including anger, depression, and anxiety decreases alertness, alters critical self-assessment and enhances risk-behaviour. Personal fitness and good health are important factors that influence situational awareness and performance. As generally in anesthesiology distraction means danger to the patient, all personnel involved in the use/programming of PCA pumps are strongly advised to avoid the following four situations:

- S tress;
- A lcohol (drugs);
- F atigue;
- E motional upset.

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