constriction 2 cm above the carina. The trachea was extubated and reintubated with a longer tube (Portex no. 5) which passed beyond the constriction, improving ventilation. Histological examination of the cervical node biopsy confirmed the clinical diagnosis of Hodgkin's disease. Seven hours after the event cytotoxic chemotherapy was begun and continued for seven days with vincristine 1.8 mg and chlormethine 7 mg. The next day procarbazine (250 mg/m^2) was given. Forty-eight hours later, chest *x*-ray revealed no further atelectasis and a marked decrease in the size of the mediastinal tumor. The trachea was extubated successfully.

This case illustrates the potential hazard of general anaesthesia in children with an anterior mediastinal mass leading to airway obstruction. Dynamic pulmonary function should be assessed preoperatively with standing and supine flow volume loops.[1,2] If the risk of obstruction is high, general anaesthesia should be avoided; biopsy under local anaesthesia would be preferable. If general anaesthesia is employed, certain approaches are recommended:[3] maintenance of spontaneous ventilation, induction with head-up position, avoidance of muscle relaxants, readiness to change the patient's position rapidly to a lateral or prone position, availability of a rigid bronchoscope and other airway support equipment.

F. Montange MD
J. Truffa-Bachi MD
E. Pichard MD
Department of Anesthesiology
Institut Gustave-Roussy
39, rue Camille Desmoulins
94805 Villejuif Cedex France

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Sporadic PCA pump failure accompanied by activation of a "fail safe" mechanism

To the Editor:

In the management of postoperative pain following total knee arthroplasty with patient-controlled analgesia (PCA), pump failure has occurred in six of 27 consecutive patients enrolled in a research study (22.2 per cent). Treatment was started in the Post Anaesthesia Care Unit (PACU), where the Bard Harvard PCA pump* mounted on a dedicated mobile stand and equipped with a printer interface was programmed to deliver morphine 1.0 mg with a delay of six minutes, into an intravenous infusion. During transfer to the ward the pump was powered from its internal battery. Pump failure occurred three times following the patient's transfer to the surgical ward immediately the external power cable was plugged into the 110V electrical outlet, and sporadically during treatment of the other three patients.

Investigation of the problem revealed that the pump did not respond to the patient control button, the display panel contained the self check messages "RAM-OK CTC-OK INT-OK RTC-OK ROM-OK," and the keyboard was frozen. Using the printer interface, it was possible to obtain a print-out of the pump's performance prior to its failure, but the same information could not be obtained from the keyboard. The pump was reactivated by switching the power switch off, then on again, and then reprogramming. The memory of the interface was erased by switching the power off. The problem has been experienced by other members of the acute pain management service and has occurred with each of the six Bard Harvard PCA pumps being used.

In the light of this experience it is now my practice to obtain a record of the pump's performance immediately before the patient's transfer from the PACU. On arrival at the ward, immediately after the external power cable is reconnected the pump's performance is checked, and reprogrammed if necessary by the PACU nurse who is trained and certified to do so.

A.C. Webster BSc MB ChB FFARCS FRCPC
Department of Anaesthesia
St. Joseph's Health Centre
London, Ontario

*Bard Canada Inc., 2345 Stanfield Road, Mississauga, Ontario, L4Y 3Y3