A Pediatric Face Mask Can Be a Useful Aid in Lung Ventilation on Postlaryngectomy Patients

To the Editor—Postlaryngectomy patients with permanent tracheostomies subsequently may require anesthesia for a wide spectrum of operations. Positive-pressure ventilation sometimes is necessary after the administration of the anesthetic agents. Recently, we have successfully used a size 1 Rendell-Baker-Soucek (RBS) pediatric face mask to deliver inhalational agents under positive pressure to the patients' airway. An adult face mask does not match the size and configuration of the neck and fails to provide leakproof ventilation. The RBS type pediatric face mask has the proper contour of a tracheostomy stoma and provides several advantages. It allows an overall tight seal, making assisted or controlled ventilation possible. With a small internal volume, it minimizes dead space. And because of its softness and contour, it minimizes the pressure applied to major structures in the neck, including major vessels. Endotracheal intubation through the stoma, which requires a deeper level of anesthesia, can be avoided and this may be an advantage in patients with associated cardiovascular disease. Lighter levels of general anesthesia can be maintained and the problems of coughing and bucking on the endotracheal tube avoided. Furthermore, the possibility of endobronchial intubation by the endotracheal tube is avoided, as is contamination of the trachea by bacteria from around the stoma.

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Another Potential Failure in an Oxygen Delivery System

To the Editor—The Ohmeda (Ohio®) Modulus™ I anesthesia gas machine is equipped with an oxygen check valve, which prevents back-flow from the machine-mounted oxygen cylinder into the piped gas system, when the oxygen cylinder on the machine is in use. Recently, we have had two identical incidents where the oxygen check valve malfunctioned, resulting in potentially dangerous situations.

During routine maintenance checks of our anesthesia gas machines, it is our habit to check the integrity of the oxygen and nitrous oxide check valves by disconnecting the machine from wall gases, turning on the gas tanks, and verifying that no gas escapes through the disconnected hoses. Twice in the past year, when this test was done, there was high-pressure flow of oxygen from the disconnected hose. In both cases, the cause

FIG. 1. Oxygen check valve broken off at shoulder.