

the respiratory muscles and result in a life-threatening situation such as respiratory failure.

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## A Simple Technique to Avoid Traumatic Nasal Intubation

### To the Editor:

Nasotracheal intubation is the preferred method to control the airway for several types of surgery. Many techniques have been prescribed to reduce nasal mucosa damage. We have been using a nasogastric tube as an internal stylet to facilitate threading the nasotracheal tube. Before intubation, we cut the proximal suction port of nasogastric tube, and lubricate it with water-soluble jelly. (Fig. 1) Then we introduce the nasogastric tube into the largest patent nares and thread it gently into the posterior pharynx. We then thread the nasotracheal tube through the nostril and into the pharynx over the nasogastric tube. The nasogastric tube is then removed,

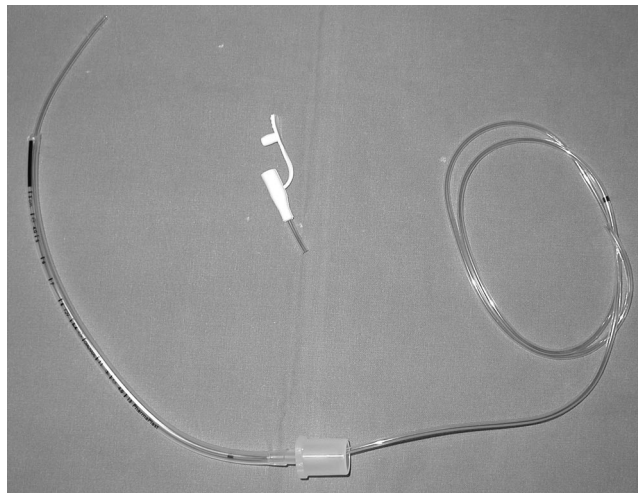


Figure 1. Endotracheal tube is threaded on the nasogastric tube and in the middle the suction port is cut.

and we use a Magill forceps to direct the nasotra-cheal tube into the trachea. We have used this method in 10 children and 15 adults, with little trauma and bleeding.

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## Postoperative Renal Failure After Aprotinin Infusion and Spine Operations

### To the Editor:

Reconstructive spinal fusion procedures are often associated with loss of large amounts of blood. Kokoszka et al. (1) made a "Grade A" recommendation to use high-dose aprotinin in long, orthopedic procedures associated with large blood losses, such as spine and hip surgery. We adopted this recommendation. If the surgeons expected a significant blood loss, patients received a 1 mL equivalent to 1.4 mg aprotinin test dose preoperatively, and they were observed for 20 min before induction of anesthesia. Shortly after induction, an initial loading dose of 200 mL equivalent to 280 mg aprotinin was administered IV over 30 min, followed by an infusion of 50 mL

equivalent to 70 mg of aprotinin per hour. The infusion was continued until skin closure.

Over a 7-mo period, during which 118 spine operations were performed with routine use of an intraoperative aprotinin infusion, acute renal failure was seen in four female patients. One patient was taking enalapril, one benazepril, and one losartan. One of the four patients received neither an angiotensin-converting enzyme inhibitor nor an angiotensin II receptor antagonist.

Renal failure has not been reported in patients after major spine reconstruction, and was not observed in our patients prior to the use of aprotinin. The combination of aprotinin and an angiotensin-converting enzyme inhibitor may have increased the risk of renal failure after operations on the spine for two of our patients. This conclusion was reached with the combination used in cardiac surgery (2). The cause for postoperative renal failure is often multifactorial; contributing factors are anemia, nephrotoxic antibiotics, decreased renal blood flow and perfusion pressure, and low oxygen saturation in the glomerulus. None of these risk factors were different before, during, and after the 7-mo period in which aprotinin was used. We speculate that the long case duration, and the large total dose of aprotinin, may

have contributed to the risk of renal failure in our patients.

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angiotensin-converting enzyme inhibitor cause renal failure after cardiac surgery? *Ann Thorac Surg* 2005;80:1388–93.

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