 Placement of a Morbidly Obese Patient in the Prone Position

To the Editor.—We offer the following approach to facilitate positioning an obese patient into the prone position.

A 28-yr-old man with morbid obesity (173 cm, 177 kg, BMI > 59) was admitted to the hospital with a herniated L5-S1 intervertebral disc. While in the supine position following extensive topical anesthesia, bilateral superior laryngeal nerve blocks were performed. After allowing the patient to breathe 100% oxygen for several minutes, his trachea was successfully intubated...
"blindly" with a nasal endotracheal tube. He then turned himself prone into a jackknife position on a giant Cloward orthopedic saddle frame, and positioned himself until he was comfortable. With his pannus suspended freely, the spontaneously breathing patient was able to maintain adequate ventilation without difficulty, as demonstrated by end-tidal carbon dioxide and pulse oximetry monitors. Anesthesia was then induced with no difficulty.

In morbidly obese patients, the less suitable lateral decubitus position is often substituted for operations where the prone position would otherwise be used. Following an awake tracheal intubation of our non-sedated morbidly obese patient, he turned and positioned himself prone. Once satisfied that the patient was comfortable and having no difficulties breathing, induction of general anesthesia and mechanical ventilation followed. We believe this technique reduced the potential problems of delivering general anesthesia to a morbidly obese patient in the prone position.

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Extracorporeal Shock Wave Lithotripsy in Infants and Small Children: Gantry Modification

To the Editor—Although extracorporeal shock wave lithotripsy (ESWL) is a widely used method for treatment of renal calculi in adults, experience with ESWL in infants and children has been limited. This is the result of several factors, including the relatively low incidence of kidney stones in children (3% of the total number of patients treated for nephrolithiasis) and the fact that the Dornier Lithotripter is not designed to accommodate individuals less than 4 feet tall. In addition, it has been reported that it is possible to cause a pulmonary contusion during ESWL in young children.1

This results from the close anatomic proximity of the kidney and lung in children, and the fact that the shock wave focus may encompass part of the lower lung field. To prevent this problem, the lungs must be shielded with polystyrene or open cell foam during the treatment.

A number of centers have reported their experiences with ESWL in children following modification of the lithotripter gantry. These modifications have taken a number of forms, including the use of a sheet or sling to suspend the child within the gantry,1 extension of the shoulder and leg supports with 2 cm thick polystyrene boards,2 and the development of a gantry insert that can be used in larger children.3 We report another gantry modification that is suitable for infants and young children (<2 yr) in the form of a gantry insert made from a modified commercially available "infant seat" and sheets of closed cell foam (fig. 1).

An infant seat which can be purchased for under $10 is placed in the gantry with the back resting on the shoulder support and the seat resting on the thigh pads. The seat is secured to the gantry with the strap located on the shoulder support to prevent the seat from moving when immersed. The seat is modified by cutting a rectangular window in the back that allows the X-rays and shock wave to pass through the seat to the patient unimpeded. A sheet of 2-cm closed cell foam (readily obtained from the packing material in the electrode

Fig. 1. Gantry modification showing the infant seat installed in the gantry.