Radial to Femoral Arterial Pressure Gradient from Massive Ascites

To the Editor:—During a recent living-related orthotopic liver transplant, we observed a significant variation between the radial and femoral arterial pressure waveforms immediately after line placement. The right radial arterial pressure was 30 mmHg higher than the right femoral arterial pressure. The radial arterial pressure correlated with the upper extremity noninvasive blood pressure. Arterial cannulation at both sites was uncomplicated, and both transducers were rezeroed and leveled at the same height. The patient had no history of arterio-occlusive disease. Immediately after the surgeons removed 6 liters of ascitic fluid, the waveform discrepancy disappeared and both waveforms correlated to within 5 mmHg. We postulate that the ascites created a compartment-like syndrome impeding arterial blood flow to the lower extremities. Once the fluid was evacuated, the arterial pressure returned to normal as evidenced by correlating radial and femoral pressure waveforms. This is another cause to consider when presented with arterial waveform discrepancy in the patient with ascites or a large intraabdominal mass.

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A Simple Towel Headrest for Infants and Children

To the Editor:—In an era of increasing cost containment and occasional equipment shortages, we are sometimes forced to “make due” with items at hand. Although these conditions most commonly contribute to frustration, they occasionally bring about creative inspiration. While administering anesthesia to children with leukemia for painful procedures several years ago, I replaced a soiled foam anesthetic pillow with a towel roll. By taking an 18 x 36 inch terry-cloth towel, rolling it lengthwise, and folding it into an α-shaped configuration (fig. 1), I fashioned a simple pediatric headrest which I continue to use today.

Terry-cloth towel rolls are especially useful for pediatric cases because they allow a large occiput to flatly rest on the operating table and they minimally elevate the neck and shoulders. Towels are ubiquitous items, available on most every ward and in most every country, and they are infinitely adjustable: roll tightness, central loop hole size, and number of towels included in the wrap may all be customized. For adults, extra towels stacked below the circular portion may better promote the “sniffing position.” Alpha-shaped towel rolls provide excellent stability and reduce unwanted side-to-side head motion. Furthermore, the towel ends may be freed from underneath the shoulders to wipe up secretions during the case and, of course, the whole towel may be used for clean up at the completion of the case. Lastly, towels are inexpensive (institutional cost, $1.00) and may be reused after laundering, thereby saving some foam headrests ($0.74 to $2.06) and plastic covering from the refuse bin.

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