

CURRENT COMMENT AND CASE REPORTS

CURRENT COMMENT is a section in **ANESTHESIOLOGY** in which will appear invited and unsolicited professional and scientific correspondence, abbreviated reports of interesting cases, material of interest to anesthesiologists reprinted from varied sources, brief descriptions of apparatus and appliances, technical suggestions, and short citations of experiences with drugs and methods in anesthesiology. Contributions are urgently solicited. Editorial discretion is reserved in selecting and preparing those published. The author's name or initials will appear with all items included.

ARM GUARD FOR INTRAVENOUS NEEDLES

One of the problems connected with surgical procedures deep in the pelvis has been the disposition of the arm by which intravenous fluids are being administered. In most procedures the arm is placed in moderate abduction on an arm board extending from the table. However, because of the deep Trendelenburg position plus operators'



FIG. 1. *Arm guard in place.*

positions, not infrequently the extended arm becomes severely hyperabducted with brachial palsy as a distinct and unpleasant possibility. The leg route is an alternative for intravenous therapy, but it has been thought by some that there may be some connection between venipuncture and thrombophlebitis.

An answer to this problem is suggested. By using an extra long piece of intravenous tubing from the bottle to the needle, the arm may be placed at the patient's side on the operating table. A guard is placed over the intravenous needle and connecting tubing. A draw sheet is wrapped about the arm and guard and then under the mattress. This permits the operator to stand close to the

table without dislodging or pinching of the tubing.

The construction of an arm guard is simple and various sizes may be made. The one illustrated is made from an old suture can from which both ends have been removed. The can is then lined with sheet wadding which is held in place with a piece of stockinet and adhesive tape.

The cost of making an arm guard is negligible, and its effectiveness in protecting intravenous needles is well worth while to the anesthetist.

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To the Editor:

Following the use of muscle relaxant drugs inspiratory laryngeal stridor develops in the occasional patient. To my knowledge, this complication has not been described in the literature to date.

Inspiratory laryngeal stridor has developed in 3 patients in my practice and I have heard of other cases. Two of the patients (of a total of approximately 300) had received flaxedil and the third (of a total of approximately 200) had received meoestrin. I did not encounter the condition in over 2,000 patients who had received d-tubocurarine chloride. All 3 patients were middle-aged men who had been given pentothal-relaxant nitrous oxide anesthesia for relatively short procedures. One was lumbar sympathectomy (sixty minutes), one, reduction of a fractured ankle (twenty minutes) and the third teeth extraction (twenty minutes). Only the last patient had been intubated. The respiratory excursion had appeared adequate in each patient at the conclusion of anesthesia, but within one to five minutes the patients became restless and had severe inspiratory stridor without overt evidence of curarization. The patient who had had lumbar sympathectomy (under flaxedil) was fully awake and could talk, but seemingly could

not control his high-pitched inspiratory stridor. He was soon relieved by administration of oxygen. The second patient who had had a reduction of a fractured ankle (under flaxedil) had further unexpected manipulation of his ankle after administration of nitrous oxide had been stopped. Nitrous oxide was again given and when he was allowed to awaken five minutes later, respiration was normal. The third patient, who had had extraction of teeth, responded rapidly to an intravenous injection of prostigmine 1 cc. (1/2,000). His condition had not improved when 10 per cent oxygen was administered.

With the newer relaxant drugs, paralysis of vocal cords appears to be relatively greater than paralysis of the muscles of respiration. Thus, respiratory power may be normal, associated with partial paralysis of the vocal cords, which then tend to fall together during inspiration. When the patient is awake or nearly so, this condition is aggravated by pain from the operative site which reflexly stimulates the strong adductor muscles of the larynx. If the patient is not treated, an hypoxic spasm of the laryngeal muscles supervenes, which in turn increases the inspiratory difficulty. On the basis of the above interpretation it is apparent why the three different forms