NEW APPLIANCES

Dependent Drainage Balloon Catheter

Mr. G. R. ROBERTS, consultant surgeon, Royal East Sussex Hospital, Hastings, writes: The 25-minute I.V.P. film of a patient's abdomen in which an indwelling balloon catheter has been left in the bladder will show a varying amount of residual dye. This residual dye occurs with the catheter on open drainage. The "eye" of the catheter lies above the blown-out balloon and drainage occurs only when the level of urine reaches the eye. There is thus a stagnant pool of urine below the eye (Fig. 1 A).

As catheters are usually inserted to provide drainage the problem is to devise a dependent drainage catheter, preferably of the self-retaining balloon variety.

A goose-necked catheter shaped like a blunt-nosed Tiemann, with a balloon moulded on the "neck," has the eye on the convexity below the balloon. When the balloon is blown up in the bladder the balloon surface on the concavity of the neck rests near the internal meatus and the eye is at the most dependent part. (Fig. 1 B.)

The catheter has to have a curved neck, as straight catheters with the eye below the balloon do not provide drainage, presumably because the eye lies in the upper urethra.

Sixteen patients admitted to hospital with acute retention due to benign prostatic hypertrophy, carcinoma of the prostate, or fibrous prostate were catheterized with one of three varieties of catheter. Two types of these catheters had the eye above the balloon and one type had a straight neck and the eye below the balloon. I.V.P. films with the catheters on open drainage showed residual urine. This was confirmed by cystography.

Sixteen patients admitted in acute retention were catheterized with the new catheter. The I.V.P. films showed no residual dye and thus complete drainage (Figs. 2 and 3). Cystogram studies confirmed these findings.

This catheter has been manufactured in various sizes, including a variety that will be

under trial soon as a post-prostatectomy catheter.

Bard-Davol Limited Specification: Bardco Foley catheter, pure latex of high modulus—

that is, a denser grade of latex—coudé tip with two side eyes, one above and one below the balloon; 5-ml. capacity balloon; inflation channel fitted with a Luer valve. Double packaged, sterile.

FIG. 1

FIG. 2

FIG. 3

FIG. 2.—25-minute I.V.P. film showing inadequate drainage with a conventional balloon catheter. FIG. 3.—25-minute I.V.P. film in the same patient showing complete drainage with the new catheter.

Plastering Table for Infants

Dr. P. B. McCOMISH, consultant anaesthetist, Oldchurch Hospital, Romford, Essex, writes: The application of plaster-of-Paris hip spicas and "frog" plasters to small children under anaesthesia presents a problem in supporting the child's body and maintaining the limbs in the correct position. In some cases the plastering is managed in a rather unsatisfactory way with makeshift apparatus and the services of an otherwise unnecessary number of assistants to hold the limbs and body. Often it is necessary to turn the anaesthetized child face down to complete the posterior part.

The apparatus described here was designed to make the plastering as easy and as safe as possible; it was constructed from odd bits and pieces of materials.

The apparatus consists of a head and shoulder rest and a pelvic rest; they are connected by two strips of an aluminium alloy which support the trunk. (The alloy is radio-

translucent enough not to interfere seriously with x rays.) The metal strips are 1 ft. 9 in. (53 cm.) long by $\frac{1}{2}$ in. (1.3 cm.) wide by $\frac{1}{8}$ in. (0.3 cm.) thick and are set about 2 in. (5 cm.) apart. These fittings are mounted on a piece of Formica-topped chipboard 2 ft. 3 in. (69 cm.) long by 12 in. (30 cm.) wide by 1 in. (2.5 cm.) thick which is fixed on an adapted bowl-stand at a convenient working height of 2 ft. 9 in. (84 cm.).

HEAD AND SHOULDER REST

The head rest was made from a rod of mild steel $\frac{1}{8}$ in. (0.3 cm.) in diameter curved into a U shape with the open ends pointing caudad and fixed under the shoulder plate. The space inside the U, where the head is positioned, is 6 $\frac{1}{2}$ in. (16.5 cm.) wide by 6 $\frac{1}{2}$ in. (16 cm.) long and is filled in with a folded piece of leather, with cotton-wool padding inside the fold. Eyeholes are punched round

the edge of the leather, which is cut to fit in the shape of the frame, and it is laced to the frame.

The shoulder rest is a metal plate 9 in. (23 cm.) wide by 3 $\frac{1}{4}$ in. (8.3 cm.) long and $\frac{1}{8}$ in. (0.3 cm.) thick covered with leather and suitably padded; its top is 9 $\frac{1}{2}$ in. (24 cm.) above the chipboard. It is supported on a vertical cylindrical pillar $\frac{3}{8}$ in. (1.6 cm.) in diameter and 3 $\frac{1}{4}$ in. (8.3 cm.) long with two short rods projecting at right angles near its lower end. These two rods, which are opposite each other, locate in slots in a vertical tubular pillar 1 $\frac{3}{8}$ in. (3.5 cm.) long with an internal diameter of 11/16 in. (1.7 cm.) so that the upper pillar can fit into it.

The support was made in two parts so that the head and shoulder rest can be easily and quickly detached with the child still on it. The lower end of this vertical supporting pillar arises from the centre of a metal frame shaped like a D lying on its straight side—