A NEW STOMACH CLAMP

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An efficient stomach clamp is one which exerts an even and sufficient pressure across the whole width of the stomach without causing undue trauma at any one point. Very few stomach clamps at present obtainable fulfil these conditions satisfactorily because they are mainly constructed on the 'bow handle' principle, or are of the crushing type. All clamps of this type necessarily exert most pressure at the end of the blade nearest to the hinge and less pressure in proportion to the distance from the hinge until at the far extremity of the blades the clamp becomes inefficient. Various devices have been introduced in the attempt to overcome this difficulty, but they have been, and must be, largely unsuccessful as long as the 'bow handle' principle is adopted.

The clamp which is here described is so designed that true parallel action between the blades is obtained thereby satisfying the degree of efficiency demanded above.

Such parallel action of the blades became possible as soon as it was recognized that the blades could be brought together firmly enough by finger pressure only, and that the great leverage exerted by the 'bow' type of instrument was unnecessary.

The clamp consists of two straight blades transversely serrated in the normal manner, which are capable of being approximated to each other in a parallel position, thus giving equal compression throughout their entire length. The base blade has at each end a rod fixed at right angles in which are cut ratchet teeth on their inner surfaces. These rods pass through holes in the corresponding position on the other blade which contain spring controlled ratchet locks automatically fixing the blades in any position. Attached to each lock is a finger ring which lies in the same plane as the blade, and beyond its ends. These are controlled by internal springs of 'staybrite' stainless steel. When the two finger rings are pressed towards each

other the ratchet locks are open and the blades may be released from each other.

The clamp has been designed primarily for use in partial gastrectomy operations and is equally effective in all variations of this technique.

When the stomach has been completely mobilized in the usual manner the clamp is applied to the proximal portion to which the anastomosis is to take place. In order to do this the blades are parted from each other completely and the base blade is placed behind the stomach with the two rods facing upwards. The upper blade is then loosely applied to the base blade and the clamp is placed in the required position on the stomach and the blades are pressed together.

After the first or posterior line of anastomosis has been completed temporary relaxation of the pressure, in order to determine that haemostasis is complete, is easily obtained by releasing one end of the clamp only. The clamp is again closed until the anastomosis is complete.

No provision is made for the blades to be covered with rubber as this is not considered necessary. The pressure exerted on the stomach is not severe and is of short duration only. Long use of the clamp has not shown that any ill result follows this practice.

Advantages claimed for this clamp over other types of gastric clamps in common use are:

1. Even pressure across the whole width of the stomach is obtained by true parallel action.
2. There are no sharp projections which may injure the liver when the clamp has to be applied high up under the left lobe.
3. The clamp is light in construction and is easily applied and removed.

I wish to express my sincere gratitude to Mr. Shugar of Messrs. John Bell and Croyden for the great help he has given me in perfecting this instrument. The overall length of the clamp is 5½ in. and may be obtained from Messrs. John Bell & Croyden, W.1.

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