

DRAINS IN SURGERY: ARE THEY REALLY NEEDED?

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'Drainage of the body cavities save many lives.' This philosophy is being practised without any randomized control trial. It was claimed in the early twentieth century that drainage of an operation site had overcome many complications which would have occurred otherwise in the postoperative period. In 1866 Gross said, "Can the thyroid in the state of enlargement be removed. Emphatically experience answers no. Should a surgeon be so foolhardy as to undertake it, every stroke of the knife will be followed by a torrent of blood and lucky it would be for him if his victim lived long enough for him to finish his hurried butchery. No honest and sensible surgeon would ever engage in it."¹

Contrary to what Gross said, surgeons world wide performed many thyroidectomies in the twentieth century with gradually decreasing mortality. This success has been attributed mainly to the effective drainage of the operation site. On the other hand a study has been published, recently, from West Indies where the largest ever series of 259 patients underwent thyroid surgery in fifteen years without drainage.² The revolution in the field of Medical Engineering has resulted in a wide range of Electromedical appliances. The better understanding of the principles of antiseptics and the use of proper, more effective and broad spectrum antibiotics has made it possible not to have post-operative intra-abdominal pus collection.³

Better training in surgery and the availability of expertise in many subspecialties have all resulted in minimum devitalization of tissues.³ If a surgeon follows these golden principles then, of course, he has to think why a drain is to be put at the site of operation. Many authors have found that a drain after cholecystectomy is unnecessary; while others have not condemned the use of it.^{4,5,6,7,8} JM Manson et al studied 479 patients in two groups; in one group a drain was put after cholecystectomy and in other group it was not. They found no difference in the outcome. These authors rather inferred that a drain may do harm than good.⁵ From the existing world literature it is advisable not to put drains after elective and uncomplicated cholecystectomy. There are reports that a drain is not needed after Rectal and Colorectal anastomosis.^{9,10} If at all a drain is to be put then it becomes irrelevant whether it is passive or of suction type.¹¹

It is clear from the above discussion that in abdominal surgery the use of drains may be reduced to strict criterion as more and more trials have failed to show any benefits of putting drains in many elective procedures. It has become clear that if drains are not put in certain situations; the end result is the same as would have been with a drain. A more solid reason against the use of drains has come from the Ultrasonographic evaluation of the site of operation and the most probable site of

postoperative collection. Such studies have not supported the view that a drain actually drains postoperative collection effectively.^{11,12}

The use of drains is not without morbidity. Higher incidence of wound infection is reported with abdominal drainage. Small and large bowel perforations caused by drains have also been reported recently.^{13,14,15}

Indications for putting a drain should come to a minimum. The time has come to stop putting intra-abdominal drains injudiciously. We the general surgeons must reconsider our options, priorities and indications for the drainage of abdominal cavity. In many of the elective abdominal procedures this, I am sure, will save money and protect our patients from many harmful effects of the drains.

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