

Ideas and Innovations

A simple and effective way of maintaining the microvascular field clean and dry during anastomosis

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ABSTRACT

During microvascular anastomosis, it is important to maintain the microsurgical field irrigated yet dry so as to achieve a good view of the vessels for approximation. In this method, an infant feeding tube (size 4), with its tip sandwiched between layers of dry gauze and a surgical glove component placed in the anastomotic field and the other end connected to a suction apparatus, is used to maintain the microsurgical field free from flooding. It also has the additional advantage of providing a stable platform for microvascular anastomosis.

KEY WORDS

Anastomosis; microreconstruction; microsurgical field

INTRODUCTION

Maintaining the microsurgical field, free from flooding with irrigation fluid, is important to get good vessel approximation in microsurgery. The commonly followed practice is to keep dry gauze at the periphery of the field so as to siphon off the excessive fluid. A certain amount of the irrigation fluid still remains in the field and causes adhesion of the suture material with the anastomotic clamp or the background material or to the vessel wall and thereby frustrating the surgeon while applying the microknots. We present our technique that avoids the aforementioned, and in addition provides a good

platform to perform microvascular anastomosis.

Technique

The wrist part of a surgical glove is separated from the digital part. This is folded over a dry gauze and then fenestrations are made in the surface and on the two margins [Figure 1] of the glove component so as to provide for continuous drainage of the irrigation fluid to the gauze. The tip of the infant feeding tube (size 4) is then passed in to the gauze [Figure 2] and the whole assembly is then placed in the microsurgical field deep to the vessels to be anastomosed and thus provides a platform for the microanastomosis. The vessels to be anastomosed are laid over a background on the platform and then the proximal part of the feeding tube is connected to a suction system so as to provide continuous suctioning of the irrigation fluid that keeps the microsurgical field clean and dry and also by keeping away the tip of the feeding tube from the surgical field [Figure 3].

The wrist part of the glove component has been described

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Figure 1: The wrist part of the glove with open ends and fenestrations on the surface to facilitate siphoning off of the irrigation fluid

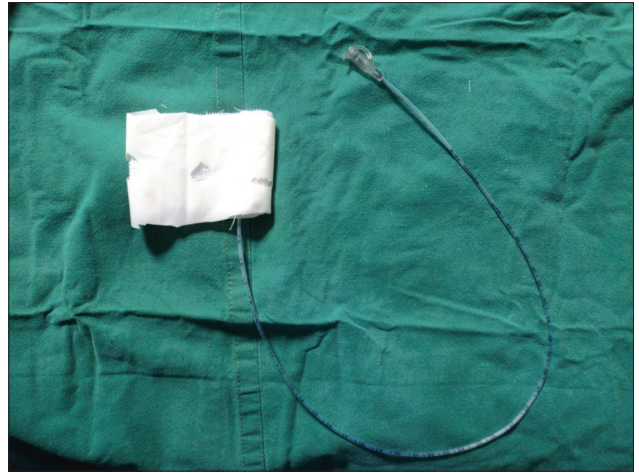


Figure 2: The tip of a size 4 infant feeding tube is passed between the layers of gauze

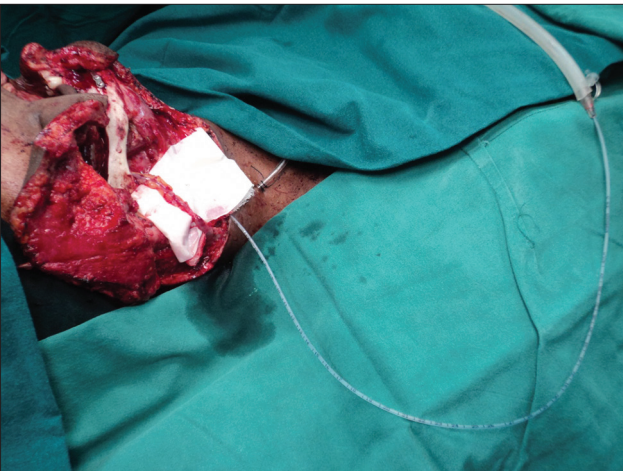


Figure 3: The entire assembly is shifted to the neck for anastomosis forming a good platform for anastomosis. The proximal end of the infant feeding tube is connected to the suction tube

in the past to transfer the pedicle of the flap from the oral cavity to the neck^[1] for microanastomosis and in this report we present a technique in which the component can be used to keep the operative field clean and dry and also to provide a stable platform to perform a perfect microanastomosis.

REFERENCE

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