CERVICAL TRACHEA RECONSTRUCTION USING PLATYSMA MYOCUTANEOUS FLAP

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Abstract

Cervical trachea reconstruction with a non-stented playsma myocutaneous door flap (NPMCF) was studied in 20 dogs. Window defects involving 5 and 10 tracheal rings from the anterior tracheal wall were produced in 2 different groups of animals. The results were evaluated by clinical follow-up of up to 3 months, by postoperative endoscopies 1 week after surgery and 1 day before killing the animal and by macroscopic examination after the animal's natural death or sacrifice.

The NPMCF proved to be adequate for the reconstruction of window defects limited to 5 and 10 rings, with success rates of 100% and 75% respectively. The use of the NPMCF for tracheal reconstruction has the following advantages: relatively simple, easy and expeditious surgery; use of single operative field; versatility, dependability and ease of harvesting of the flap; availability of large amounts of donor tissue which allows tension-free cervical closure; adequate thickness; no need for microsurgical techniques; reliable irrigation; resistance to environmental exposure as evidenced by absence of infection; and 100% take rate with no scar stenosis at the suture line. Hair growth and accumulation of secretions was the only limitation of this method. However it can be easily dealt with. It can be anticipated that this method has a potential for application in well selected patients.

Introduction

Tracheal stenosis is a serious disease of the upper airways. With advances in resuscitation its incidence in steadily increasing (Harustiak et al., 1996). Tracheal reconstruction continues to be a challenge in head and neck surgery. A wide range of therapeutic procedures including the use of al-