Since the initial description of dacryocystorhinostomy (DCR) in 1904, the modern day DCR has been modified many times. A common cause of failure of the DCR is closure of the nasal ostium as a result of cicatricial soft tissue obstruction. Attempts at keeping this nasal ostium patent have resulted in many modifications and they have included the use of various forms of packing, suturing of flaps, nonsuturing of flaps, and a variety of alloplastic stents and other devices. The device that will be described here has evolved after multiple previous attempts at improving the patency of the DCR fistulous tract. None of the previous modifications have been as successful as the use of this nasolacrimal catheter.

Methods

The Griffiths Nasolacrimal Catheter is an alloplastic material that is shaped like a collar button (Figure 27.1). This is a self-retaining device made from a soft silicone-like material and can be used in either the external approach or the endonasal approach DCR. Once standard canalicular intubation tubes have been placed, the nasolacrimal catheter can be inserted. By passing the canalicular probes through the lumen of the nasolacrimal catheter, the catheter can then be advanced along the path of the tubing and passed into the nostril with a small bayonet forceps (Figure 27.2). The proximal collar of the catheter is then pulled through the nasal ostium with a toothed forceps, if an external approach is used. This system is diagrammed in Figure 27.3. The proximal collar of the catheter is then placed into the lacrimal sac fossa under the orbicularis muscle (Figure 27.4). The nostril is then inspected with a nasal speculum or endoscope to see that the distal collar is overlying the nasal mucosa (Figure 27.5). This combination of canalicular tubes and nasolacrimal catheter is then left in place for 6 months.

Removal of these tubes and catheter is accomplished in the office. The canalicular tube is divided with scissors in the medial canthus.
FIGURE 27.1. Collar button design of the Griffiths Nasolacrimal Catheter.

FIGURE 27.2. Diagram depicting placing the nasolacrimal catheter over the canalicular probe and tubes.