Balloon catheter dilatation of common canaliculus stenoses

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OBJECTIVE: To determine the efficacy of balloon catheter dacryocystoplasty in treating stenoses of the common canaliculus. MATERIALS AND METHODS: Between 1997 and 2004, elective balloon catheter dilatation was performed under local anesthesia in 36 patients with epiphora and dacryocystography (DCG)-proven high-grade stenosis of the common canaliculus. Eight of the 36 patients had additional stenosis of the nasolacrimal duct. A 2.5-mm diameter balloon was used for common canaliculus obstructions, a 3-mm balloon for nasolacrimal duct obstructions. RESULTS: Dilatation was technically successful in 34/36 patients. In 2/36 patients the guide wire could not be advanced beyond the obstruction. There were no complications. During a mean follow-up of 9 months restenosis occurred in 4/36 patients, in one of whom it led to occlusion of the common canaliculus; a chronic dacryocystitis had already resulted in occlusion of the common canaliculus in this patient's other eye. Two of four restenoses were successfully dilated in a second procedure. In one patient, a bilateral presaccal occlusion was suspected clinically. DCG revealed a high-grade common canaliculus stenosis in both eyes. After balloon catheter dilatation the patient was complaint free in one eye, and in the other eye symptoms improved. CONCLUSIONS: The therapy of choice for common canaliculus stenoses in addition to canaliculodacryocystorhinostomy is silicone tube implantation. The results of both procedures, however, are often disappointing. Balloon catheter dilatation is a minimally invasive technique carried out under local anesthesia which represents an alternative therapy option for the treatment of stenoses of the common canaliculus.