

The contribution of nasal endoscopy to dacryocystorhinostomy surgery.

THE AIM

This prospective study aims to evaluate the benefits of endoscopy in DCR surgery through an analysis of outcomes in 30 patients.

INTRODUCTION

Dacryocystorhinostomy (DCR) is a surgical procedure that establishes a permanent communication between the lacrimal sac and the nasal passages. This diversion is particularly indicated when the lacrimal pathways are blocked at the lower part of their course, and tears can no longer be drained into the nose

ANNALYS AND RESULTS



DISCUSSION

Série	Nombre de cas	Age Moyen	Série	Nombre de cas	Age Moyen			
			Sadiq [43].	167	32,2			
Sadiq [43].	167	79,3%	Dolmann [90]. 153	35,7			
Dolmann [90].	153	78,9%	Favet [11].	649	42.5			
Fayet [11].	649	82,2%	Aich [01]	40	20.4			
Aich [91].	40	57,5%	Alth [91].	40	39,4			
Notre série	30	73,3%	Notre série	30	42,5			
Condordistri	hution cocordinate the li	to return to a						

Gender distribution according to the literature varies

Age distribution varies according to the literature

According to the literature, the consultation delay varies. In our study, we found that the average consultation delay is 58.32 months. The good tolerance and neglect of patients for symptoms of dacryocystitis are related to this long consultation delay.

Dr Messaoudi.K., Pr Yahi N.

The dacryoscanner is the examination of choice in the exploration of lacrimal pathways: Preoperatively, it provides information on: •the location.

•the nature of the obstruction.

•the course of the intervention, potential difficulties to anticipate in the presence of anatomical variations or associated naso-sinus pathologies. Postoperatively, it helps identify the factors contributing to DCR failures.

N.B: Naso-sinus cavity scanning constitutes a medicolegal document before any nasal endoscopic surgery (FESS)

The indications for endoscopic endonasal approach have expanded significantly in recent years. The advancement of endoscopic sinus surgery (FESS) has led ENT surgeons to increasingly perform DCR procedures independently. Patients with nasolacrimal duct obstruction, a history of sinus surgery, facial trauma, or previous failure of external DCR treatment are good candidates. In cases of prior DCR failure, endoscopy can help visualize previous scar tissue (Orcut et al., 1990). [13].

Endoscopic DCR offers several advantages over external DCR. Perhaps the most recognizable advantage is the fact that the endoscopic approach is more aesthetically appealing due to the absence of visible scars and bruising, without skin and orbicular incisions. Return to normal daily activities and patient satisfaction are naturally quicker. In our series, the endonasal technique was preferred by 24 patients (80%) for aesthetic reasons. These patients consulted an ophthalmologist beforehand and opted for the endoscopic approach.

Note that the endoscopic endonasal approach is particularly favored in certainsituations: Acute dacryocystitis, Revision surgeries for

failed external DCR, Associated sinus pathology, Dacryolithiasis

	Bilateral surgery	in a	single	surgical	session	can b	e proposed	due	to t	he short	duration	of the
--	-------------------	------	--------	----------	---------	-------	------------	-----	------	----------	----------	--------

procedure. Several studies have shown that the rate of intraoperative bleeding in endoscopic

DCR is reduced compared to external DCR (Hartikainen et al., 1998; Shun-Shin, 1998).

To optimize results: the use of transillumination fiber, preservation of the mucosal flap, a wide stoma, opening of ethnoidal cells, placement of a bicanalicular stent, and postoperative care. Several authors have hypothesized that the endonasal approach could be more effective as it does not violate the lacrimal pump system, thus minimizing collateral damage to the skin, muscles, and surrounding structures (Hartikainen et al., 1998). This approach also provides a direct view of nasal anatomy, potentially making it more precise and less traumatic.

Série	Voie externe	Succès	Voie endonasale	Succès
Javatte [75]	47	94%	45	90%
Sadiq [76]	67	81%	50	70%
Hartikainen [77]	32	91%	32	63%
Cokkeser [78]	79	90%	36	89%
Dolmann [79]	153	93%	201	93%
Fayet [58]	649	82%	300	87%

Comparison within the same team of the outcomes obtained by endonasal DCR and external DCR. (Aich et al., 2016)

Many authors have hypothesized that the endonasal approach might be more effective as it does not disrupt the lacrimal pump system, thereby minimizing collateral damage to the skin, muscles, and surrounding structures (Hartikainen et al., 1998) [8]. This approach also provides a direct view of nasal anatomy,

potentially making it more precise and non-traumatic.

In the literature, intraoperative complications are rare and are most often due to visualization problems of the operative site, either related to bleeding associated with concomitant nasal-sinus surgerv or to nasal cavity configuration (septal deviation, Concha Bullosa, postoperative or post-traumatic nasal cavity changes). The failure of DCR can be defined as follows:

1. Persistence of subjective tearing associated with objective evidence of defective tear drainage.

2. Presence of reflux upon lacrimal duct irrigation.

3. Presence of stenosis or obstruction of the stoma on endoscopic endonasal examination."

CONCLUSION

Endoscopic endonasal DCR is a physiological and aesthetic technique. It is as effective and reliable as the external approach with a practically comparable success rate (85% to 90%). The endoscopic approach appears justified whenever there is coexisting nasalsinus pathology to be operated simultaneously, in rare medically irreducible lacrimal abscesses, when fear of scarring obstructs a legitimate surgical indication, and in revision DCRs.

 Moreover, the success of endoscopic endonasal dacryocystorhinostomy is contingent upon multidisciplinary collaboration. We also emphasize that transillumination is a reliable means to localize the site of the stoma and constitutes an interesting alternative to initiate this surgery safely.

