Endoscopic DCR VS LASER-Assisted DCR

"Comparative study"

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ABSRACT

Design:

Prospective interventional clinical trial study for 24 months (from February 2013 to February 2015) at Diwanyia teaching hospital.

Subject:

Fifty patients aged 10-62 years with chronic nasolacrimal duct obstruction not resolved by conservative measures.

Methods:

All the patients were received medical treatment and coservative measures for several weeks before starting surgical treatment , then patient divided into two groups:

Group 1: treated by endonasal DCR (25 patients).

Group 2: treated by endonasal laser-assisted DCR (25 patients).

The procedure was performed under general anasthesia for both groups . In both groups bicanalicular silicone stent was used , success of procedure was determined by the absence of epiphora (subjective) and patency of lacrimal system on irrigation (objective). Patients in both gruops followed for 7-14 months.

Result:

Endonasal DCR was done to 25 patients (group 1), and endonasal assisted- DCR for 25 patients (group2) , the average time of procedure in group 1 was 38 minutes, while in group 2 was 25 minutes ,the silicone stent was removed 4-6 months after the surgery.

Absence of epiphora was in 20 patients out of 25 (80%) in group 1 , while it was in 16 patients out of 25 (64%) in gruop 2 which was significant ($P<0.001$).

Five patients in group 1 develop postoperative adhesion (20%), while in group 2 was 9 patients (36%).All recurrent cases in group 1 due to adhesions , after revision surgery only 2 patients improved raising the success rate to 88% , in group 2 two patients improved after revision surgery raising succes rate to 72% .

Conclusion:

We conclude that endonasal DCR is effective as is endonasal laser – assisted DCR with higher success rate in the former , but with lesser time in the later.