

The impact of dacryocystorhinostomy (DCR) on the quality of life of patients with epiphora, as assessed by the Glasgow Benefit Inventory (GBI)



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Introduction:

- Endonasal dacryorhinocystostomy is a surgical procedure performed by ENT surgeons, operating alongside ophthalmologists, aimed to reduce symptoms of epiphora caused by nasolacrimal duct obstruction.
- The Glasgow Benefit Inventory (GBI) is a validated outcome measure often used in ENT to assess outcomes of operations. It comprises 18 questions which assess whether the outcome of the procedure has had a positive or negative impact on the patient's health and well-being, confidence, self-esteem, relationships, family support, social life and job opportunities. Questions are scored using the Likert system.
- The purpose of our project: to determine patient's perception of impact on their quality of life following DCR

Methods:

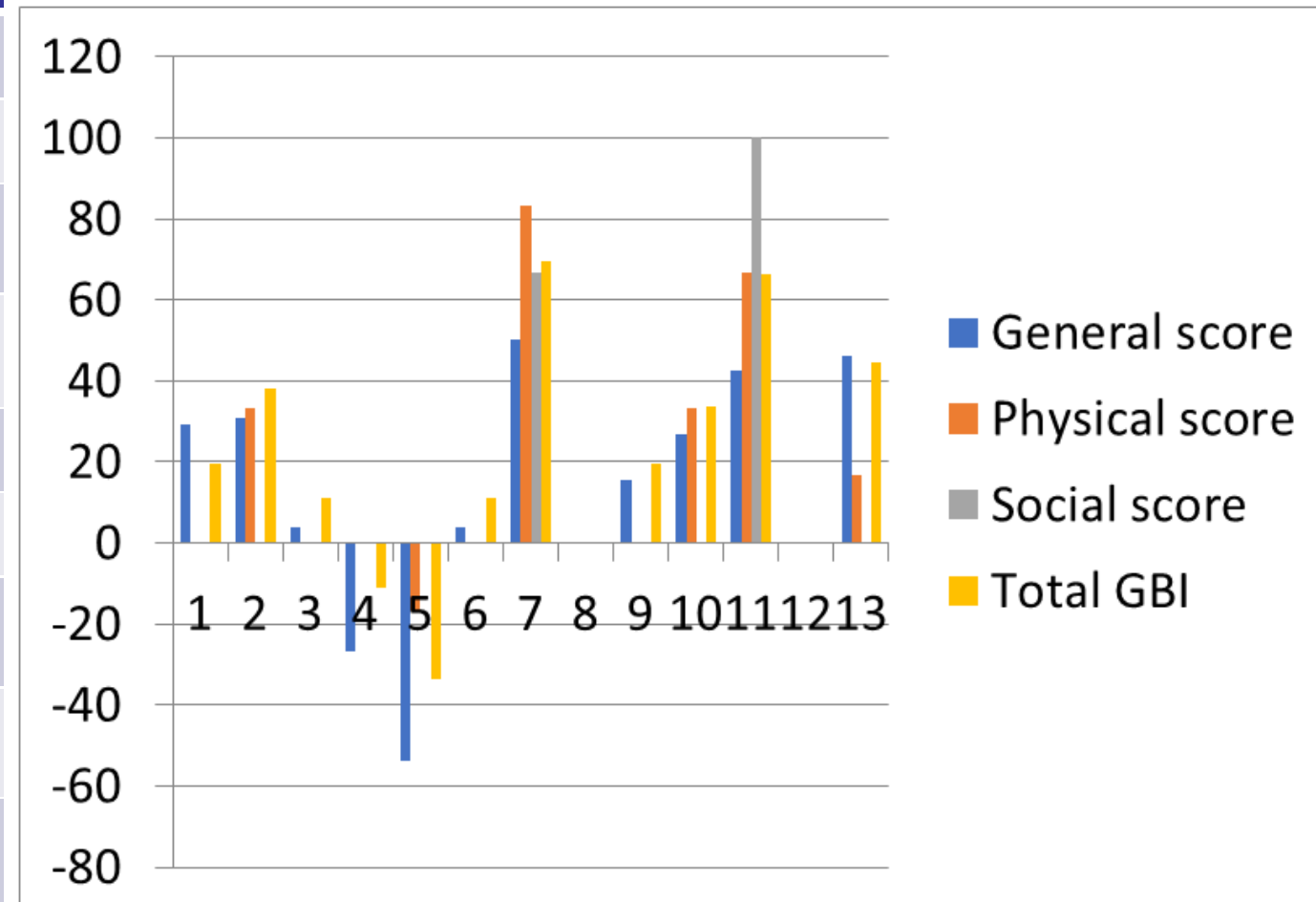
Data was collected by posting out the Glasgow Benefit Inventory (validated for DCR) to all adult patients (26) who have had DCR at the Cumberland Infirmary between Sept 2016 and August 2017 6 months post-op. The response rate was 53% (14) and some patients wrote comments. 1 patient wrote that the questionnaire was irrelevant and only completed one question, so this response was excluded.

The questionnaires were then scored as per the original paper describing the GBI¹. The following calculations were made: average score per GBI question, total GBI score for each respondent, General, Physical and Social scores.

Results:

GBI question and average score

Has the result of the DCR affected the things you do? (3.84)
Have the results of the DCR made your life better or worse? (4.23)
Since your DCR, have you felt more or less optimistic about the future? (3.31)
Since your DCR have you felt more or less embarrassed when with a group of people? (3.92)
Since your DCR, do you have more or less confidence? (3.84)
Since your DCR, do you feel more or less self-conscious? (3.08)
Since your DCR, are there more or fewer people who really care about you? (3.31)
Since your DCR, do you catch colds or infections more or less often? (3.38)
Have you had to take more or less medicine for any reason, since your DCR? (3.23)
Since your DCR, do you feel better or worse about yourself? (3.69)
Since your DCR, have you found it easier or harder to deal with company? (3.31)
Since your DCR, do you have more or less support from your friends? (3.31)
Have you been to your family doctor, for any reason, more or less often since your DCR? (3.38)
Since your DCR, do you feel more or less confident about job opportunities? (3.18)
Since your DCR, do you have more or less support from your family? (3.17)
Since your DCR, are you more or less inconvenienced by your health problems? (3.38)
Since your DCR, have you been able to participate in more or fewer social activities? (3.23)
Since your DCR have you been more or less inclined to withdraw from social situations? (3.00)
Average score across all domains (3.43)



Conclusions:

- The majority of our patients (76.9%) reported that their lives were somewhat or much better following DCR. The biggest improvements were in reduced embarrassment (3.92), enhanced self-confidence (3.84) and being able to undertake more activities without restriction (3.84).
- The average total GBI score was +20.3, the average general score was +12.9, the average physical health score was +16.7 and the average social score was +12.8.
- Due to small samples size, it could be misleading to perform statistical analysis on these results.

References:

¹ Robinson et al. Measuring patient benefit from otolaryngological surgery and therapy. The Annals of Otolaryngology, Rhinology & Laryngology; Jun 1996; 105, 6; p. 415-22.