

# The Birmingham Bone Anchored Hearing Aid (BAHA) programme: some audiological and quality of life outcomes

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The Birmingham BAHA Programme started in 1988 and since its inception more than 350 patients have received a BAHA. This includes both adult and paediatric patients. No studies had been undertaken to evaluate patient satisfaction and quality of life outcomes. This outcome analysis was considered necessary and a postal and interview based questionnaire study was undertaken in 2000. The chapters in the first section after the introduction provide a detailed account of the patient satisfaction analysis.

The instruments that have been used for the evaluation of patient satisfaction and quality of life in our studies have been used and validated in literature. These include the Glasgow Benefit Inventory (GBI), the Nijmegen group questionnaire, the Entific Medical Systems questionnaire and the Glasgow Hearing Aid Benefit and Difference Profiles (GHABP and GHADP).

The first three questionnaires were used as postal instruments while the GHABP and GHADP were administered as interview based questionnaires.

A good response rate was achieved and in general, most patients were extremely satisfied with their BAHAs. Most patients preferred their BAHA to the previously used conventional hearing aids and there was a definite improvement in their quality of life after using the BAHA.

The second section addresses our experience with bilateral BAHA fitting. This was started in 1995 after some of the patients on the programme applied for a second side BAHA. Our series is small with bilateral fitting, however, the results are comparable to that of larger series such as that of the Nijmegen group.

Both subjective and objective evaluations of bilateral BAHA were undertaken. The Glasgow Benefit Inventory was used to study quality of life issues. The Chung and Stephens questionnaire that addresses binaural hearing issues was also administered. The results showed a high degree of satisfaction after bilateral fitting compared to unilateral fitting.

Objective evaluation of patients with bilateral BAHA fitting showed better speech perception in noise.

The next section addresses the positive attributes and the shortcomings in the knowledge, attitude and the practice of bilateral hearing aid fitting amongst ENT practitioners in the United Kingdom. Financial constraint on the National Health Service was the single deterrent as regards bilateral hearing aid fitting.

A modified technique of soft tissue reduction for placement of the fixture-abutment assembly has been described in the next section. It is envisaged that this technique reduces wound related problems and hence wound revision surgery.

*Samenvatting van het proefschrift 'The Birmingham Bone Anchored Hearing Aid Programme. Some audiological and quality of life outcomes'. S.N. Dutt Verdedigd op 28 mei 2002*

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