Bone-Anchored Hearing Aid (BAHA™) is a surgically implantable system for the treatment of certain types of conductive and mixed hearing loss. It works through direct bone conduction. It was cleared by FDA by 1996 for the treatment of conductive and mixed hearing loss. In 2002 FDA approved for treatment of unilateral SNHL.

BAHA™ is very helpful in patients with congenital ear atresia, chronic ear infection, open mastoid cavity and single sided deafness patients who cannot benefit from conventional hearing aids.

Despite its well established benefits there are still patients referred for BAHA™ implant that refuse to undergo this surgery. The reasons for this are variable. The objective of this study was to review a group of consecutive patients referred to the senior author in order to identify reasons of BAHA™ refusal by some candidates.

1. The records of 100 patients were reviewed.
2. 10 patients were excluded due to incomplete data.
3. Children n = 68, Adults n = 22.
4. Commonest cause for referral are displayed on the pie chart.
5. The commonest congenital anomaly was aural atresia (36.6%).
6. 5 patients had an open mastoid cavity with conductive hearing loss.
7. Several patients were syndromic, as listed in table 1.
8. Reasons for refusal are displayed in table 2.

RESULTS

Methods and Materials

A retrospective chart review of a cohort conducted in December 2011 of the most recent 100 consecutive new patient referred to the BAHA™ program in a tertiary health care center. The study was conducted on multiple steps.

Step 1: Data collection of all 100 patients, that included demographics, hearing status comorbidities, and audiometric tests.

Step 2: A focused review on the patients who refused BAHA™. Further review of data was done with attention to the reason of refusal.

Step 3: Descriptive statistics were applied to characterize the demographics, diagnosis and hearing condition of patients. Reasons for BAHA™ refusal were listed.

Methods

A retrospective chart review conducted in December 2011 of the most recent 100 consecutive new patients referred to the BAHA program in a tertiary health care centre. Candidates' demographics, hearing status, Co-morbidities and audiometric tests were all recorded. Patients' acceptance or refusal was noted alongside the reasons to refuse BAHA.

Results

100 new patients were seen for BAHA assessment, 10 patients were excluded due to incomplete tests. There were 68 Children and 32 Adults. Conductive Hearing Loss was the most common reason for consultation (40%), followed by unilateral SNHL (23.3%). Aural Atresia was the commonest clinical finding (38.6%). 70 patients were candidates for BAHA (77.8%) as per our candidacy rules. 10 candidates refused BAHA (14.3%). The commonest reason for refusal in adults was lack of sound localization in patients with unilateral SNHL.

Conclusion

The main reason for refusal of BAHA was lack of sound localization in adults, whereas the main reason for refusal in children was cultural and social acceptance by the family. Patients with congenital anomalies were the most likely candidates to accept BAHA implants.

References