Changes in Quality of Life in Cochlear Implant Users

CENTRO DE IMPLANTES COCLEARES
PROFESOR DIAMANTE

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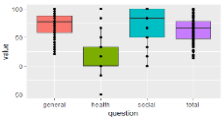
INTRODUCTON: The Glasgow Benefit Inventory (GBI), is specifically sensitive to ENT health problems and interventions. It measures the change in health status produced by surgical interventions. **For this measure, the definition of health status is the general perception of well-being, including total psychological, social and physical well-being.**

OBJECTIVE: To evaluate the changes in the Quality of Life of patients who became Cochlear Implant users.
To establish comparisons between the changes in the QoL of: different age groups at the moment of the implantation, years of CI use, multi handicapped vs. non multi handicapped patients.

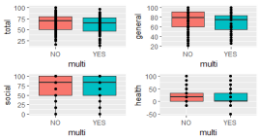
MATERIAL AND METHOD: A retrospective study in a sample of **406 patients** -among 1800 CI- Implanted at the Cochlear Implant Center "Profesor Diamante".
Between 3 months and 17 years of CI use, the Glasgow Benefit Inventory (GBI) was administrated. Statistical analysis was performed (statistical program R).

CHILDREN (N= 142)



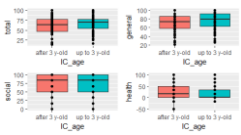
Children had the highest scores. GENERAL and SOCIAL subscales had better scores.

MULTI HANDICAPPED (N=48) VS NOT MULTI HANDICAPPED (N=94)



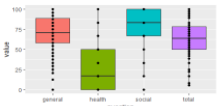
The results tend to be better in patients with NO associated handicaps, except in SOCIAL subscale, **but there is NO statistically significant difference.**

CI AT 0-3 YEARS (N=76) VS. CI AT 3 -12 YEARS (N=66)



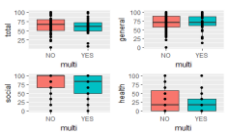
Results tend to be better when CI is BEFORE 3 years, except for he physical he subscale, but NO **statistically significant difference was found here either.**

ADOLESCENTS (N= 80)



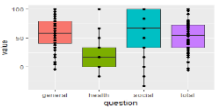
GENERAL and SOCIAL subscales show higher scores.

MULTI HANDICAPPED (N=25) VS. NOT MD (N=55)



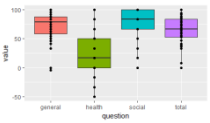
Results tend to be better in patients with no associated handicaps, in all subscales, specially in SOCIAL subscale. **Neither here are any statistically significant differences.**

PRE LINGUAL ADULTS (N= 52)



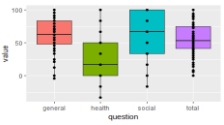
This group had the poorest results in QoL. Again, GENERAL and SOCIAL had higher scores.

POST LINGUAL ADULTS (N= 69)



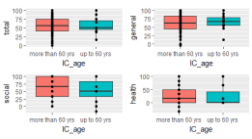
Post lingual adults and children obtained the best results in QoL. GENERAL and SOCIAL subscales had higher scores.

ELDERLY (N= 63)



Again, SOCIAL y GENERAL subscales show better reults in QoL, and PHYSICAL HEALTH had lower socres.

CI BEFORE 60 YEARS (N=11) VS. AFTER 60 Y. (N=52)



Changes in QoL are very similar in both groups (TOTAL scores). GENERAL subscale is higher before 60 y, while SOCIAL and PHYSICAL HEALTH are much higher after 60 y.

A regards "Time of Use", children and adolescentes obtained better results for more than 2 years of use, while adults and elderly obtained better results using CI up to 1 year. These differences were not statistically significant.

RESULTS: The 406 patients obtained benefits in QoL. All the areas evaluated in the GBI showed positive changes in QoL post cochlear implantation. The SOCIAL SUPPORT subscale was the most positively evaluated by all the studied patients, while PHYSICAL HEALTH was the less positively evaluated subscale. Only physical health had negative scores in few cases.
Changes in QoL are evident, even in patients expected to have poorer results, and not necessarily go along with auditory outcome, as QoL implies many other variables, and is a subjective assessment.

CONCLUSION: This study brings more data about the benefits in QoL of CI users, and is complementary to the results of CI in hearing skills. The results obtained in this study are in accordance with those of other studies.

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