

# The prognosis of migraine and tension-type headache in children and adolescents

Jacob Genizi<sup>1,2,4</sup>, Ayellet Hendler –Sadeh<sup>2</sup>, Nogah C. Kerem<sup>2,3,4</sup>



1. Pediatric Neurology Unit, Bnai Zion Medical Center, Haifa, Israel. 2. Pediatric Department, Bnai Zion Medical Center, Haifa, Israel. 3. Adolescent Medicine Unit, Bnai Zion Medical Center, Haifa, Israel. 4. Bruce Rappaport Faculty of Medicine, Technion, Haifa, Israel.

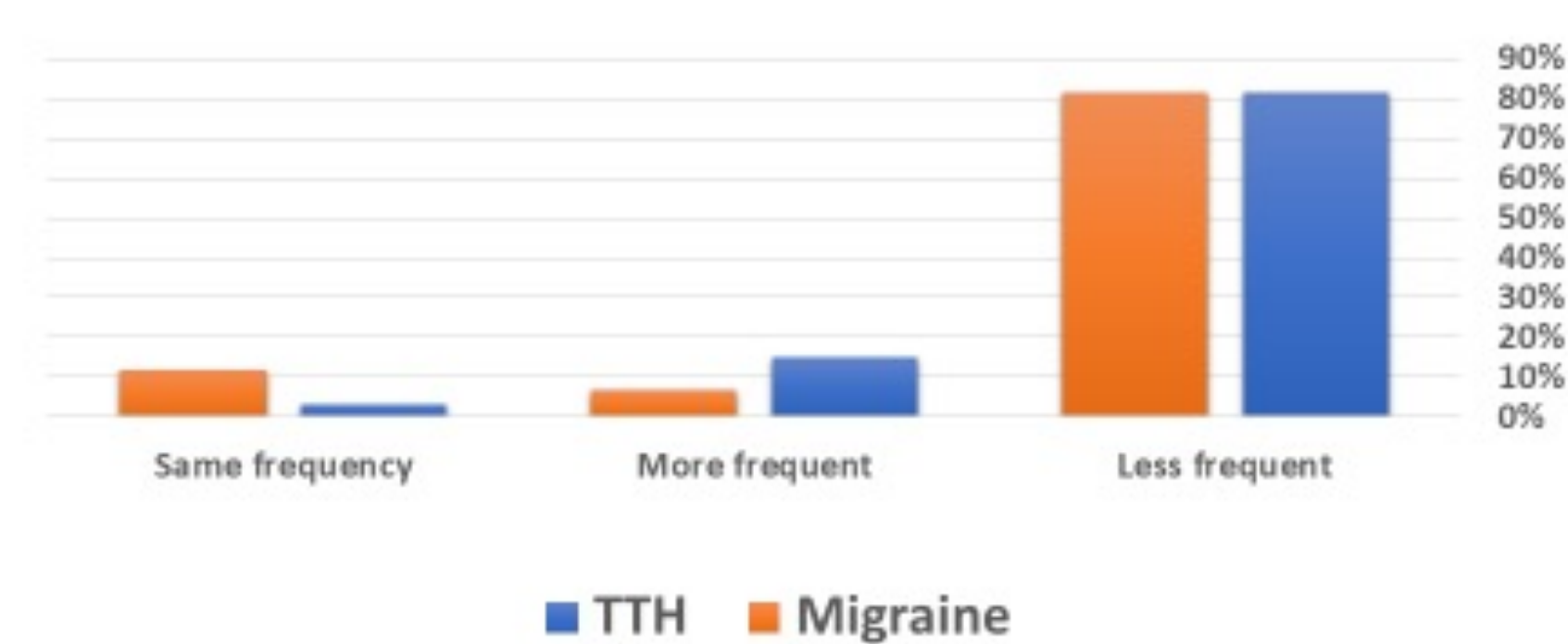
## INTRODUCTION

Migraine and TTH are common among children. The purpose of the present study was to evaluate the outcome after ten years. Can we predict who will suffer from headache as an adult?

## METHODS

Children and adolescents that visited the pediatric neurology clinic at the Bnai Zion medical center do to migraine or TTH headache between the years 2007-2010 were reevaluated.

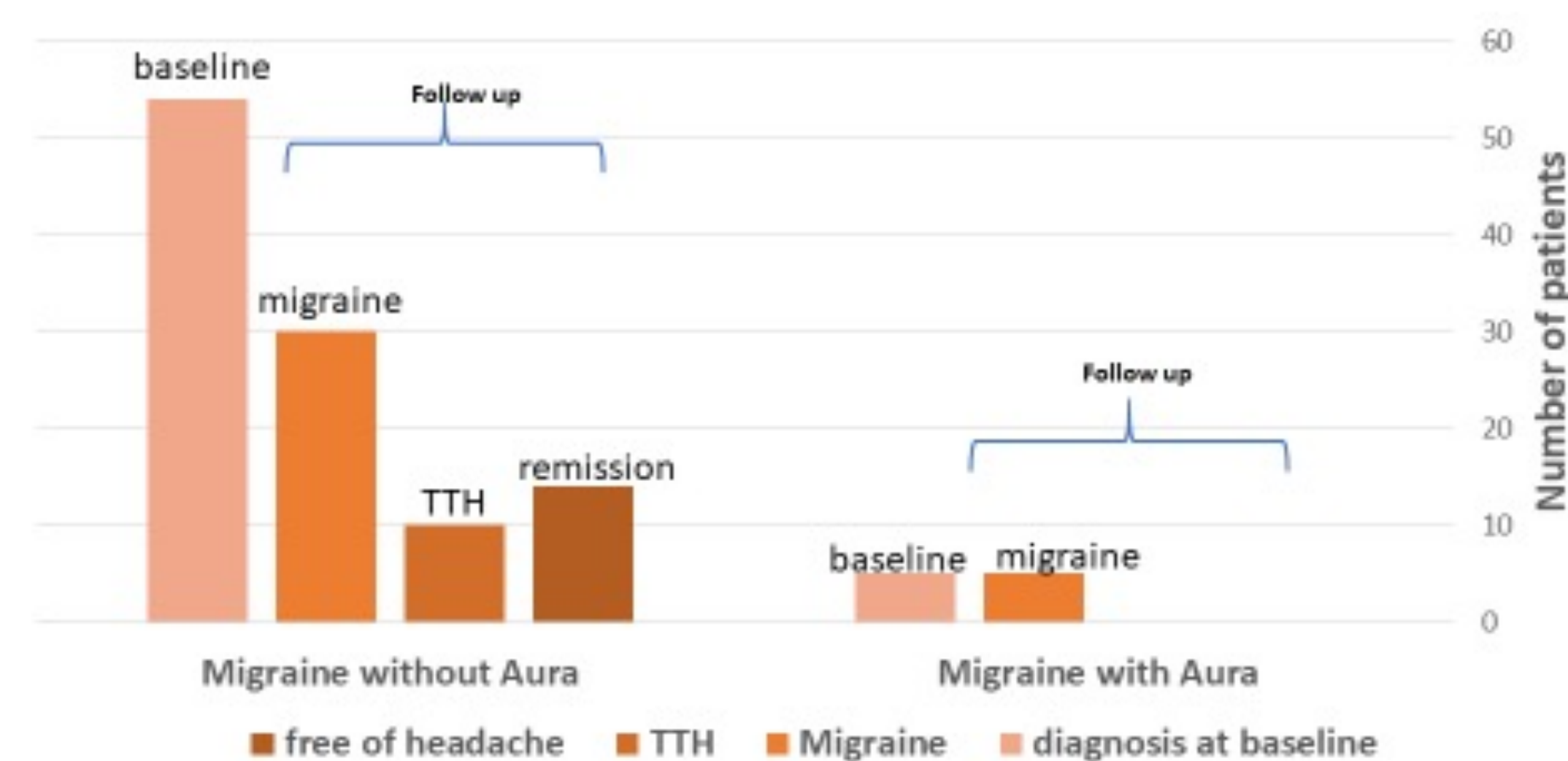
Frequency of reported episodes of Migraine and TTH after 8-10 years



## RESULTS

Out of 120 patients, 59 were seen initially do to migraine. Regarding headache frequency; 48 improved (81.4%), 4 worsened (6.8%) and 7 stayed the same (11.9%). Regarding headache diagnosis at the follow-up; 35 (59.3%) still had migraine, 10 (16.9%) changed to TTH and 14 (23%) were free of headaches. Significantly higher percentage of migraine patients who had aura ( $p<.05$ ) or photophobia ( $p<.02$ ), preserved the diagnosis migraine. 61 were seen initially do to TTH. Regarding headache frequency; 49 improved (81.7%), 9 worsened (15.0%), 2 stayed the same (3.3%). Regarding headache diagnosis at the follow-up; 22 (36.7%) still had TTH, 11 (18.3%) had migraine and the remaining 28 (45%) were free of headaches. TTH patients became headache free also twice as much and only 36.7% of the patients with TTH kept the initial diagnosis compared to 59.3% among the migraine patients. ( $\chi^2=6.07$ ,  $p<.01$ ).

Distribution of migraine headache at the second follow up



## CONCLUSIONS

Pediatric headaches, both migraine and TTH have a favorable outcome. In ten years follow-up most of the patients improved and some changed their headache diagnosis from migraine to TTH and vice versa. Children with TTH are more favorable to become headache free, than those with migraine.