

Results

This study was done on 30 cases. All thirty patients were suffering from migraine attacks with or without aura, were selected from the out patient clinic of oto-rhino -laryngologicaly, Benha University Hospital after through clinical history taking, routine general and full oto-rhino-laryngological examination. 15 cases were subjected to somatic acupuncture and another 15 cases were subjected to ear acupuncture. Their ages ranged from 18-60 years, Headache attacks were showed the typical feature of migraine according to the International Headache Society criteria, (a minimum 2 years' history of migraine, more than 2 migraine crises per month in the last year).

Clinical findings before Acupuncture treatment:

1- Age and sex:-

The age distribution of 30 patients ranged between 18 -60 years with highest incidence in second and third decades of life (table 4).

Eighteen patients were female (60%), and twelve patients were male (40%).female number were equal between migraine with aura and without aura but male were more in without aura but without significance (table 5)



Age group	No. of	%
(years)	patients	
10	1	3.3%
20	10	33%
30	8	26%
40	8	26%
50	2	6%
60	1	3.3%
Total	30	100%

Table (4): Age distributions of the patients with migraine Chart 1

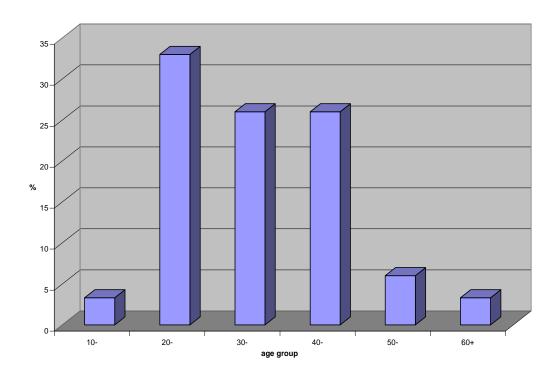


Fig. (52) Chart 1 age group of the patients with migraine



Acup th	Ear		Somatic		Tota	Total		
Sex	No	%	No	0/0	No	%		
Males 12 pt	4	26.7	8	53.3	12	40.0		
Females 18 pt	11	73.3	7	46.7	18	60.0		
Total 30 pt	15	100	15	100	30	30		
Z	2.55		0.37	•				
P	<0.01		>0.05					
Specificity	Highly significan	ce	No sign	No significance				

Table (5) Sex distribution according to Acupuncture Thereby Chart 2 There was statistically significant between male and female who treated by ear acupuncture.



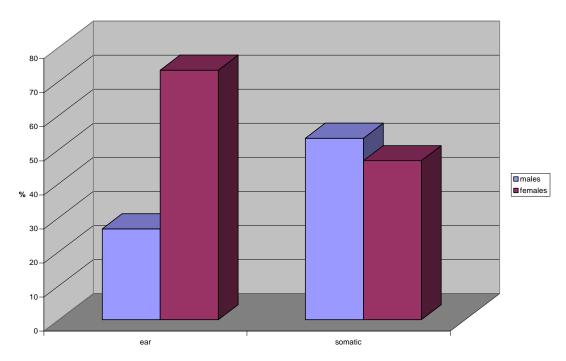


Fig. (53) Chart 2: Sex Distribution of the study group according to ACUP therapy.

2- symptomatology:

Patients presented, suffering from migraine symptoms in the form:

- Prodrome stage: twenty patients complained from prodrome 9 from them complain also with aura and 11 without aura.
- Headache phase:
 - 1. Attacks of headache were bilateral in 7 patients 5 of them not associated with aura and 2 associated with aura. Where right side presented in 10 patients equal between migraine with aura and without aura. Left side in 13 patients 7 of them were without aura and 6with aura.(table 7).
 - 2. twenty five patients were in between attack and 5 patients during attack (table 8)



- 3. Duration of attack could be classified < 12 hours which found in 15 patients 11 of them had migraine without aura and 4 of them with aura while >12 hours was complain of 13 patient 6 of them without aura and 9 complaining wit aura (table 9).
- 4. Type of pain staping in 9 patients, throbbing 20 patients and 1 patient was dull (table 6).
- 5. Severity of attacks were classified according disability score of migraine pain to grade I (mild pain not inhibit routine activities) which no cases in our study ,grade II (moderate pain that limits routine activities) was 11 patients were 8 patients without aura and 3 with aura, grade III (severe pain that forces the patient to bed) were 19 patients 9 of them were without aura and 10 patients with aura. No statically significance between migraine with aura and without aura. (table 10).
- Postdrome stage: 22 patients were complaining from postdrome 10 patients of them were associated with aura and 12 not associated with aura (table 9).

The our results showed that there was differences between migraine with aura and without aura but with no statically significance (table 9).



Acup th	Ear		Somatic		Z	P	S	
Type	No	%	No %			•		
Staping	4	26.7	5	33.7	0.33	>0.05	Ns	
Throbbing	11	73.3	9	60.0	0.45	>0.05	Ns	
Dull	0	0.0	1	6.7				

Table (6) Type of Pain according to Acupuncture Thereby Chart3There was statistically insignificant in type of pain between treated cases with ear and somatic acupuncture.

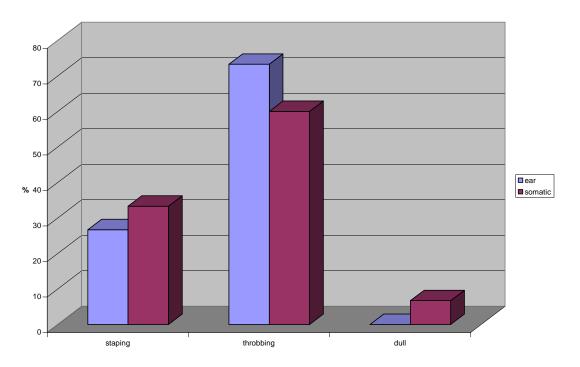


Fig. (54) Chart 3:Type of pain according to ACUP.



Acup th	Ear		Somation	c	Z	P		
Site	No	%	No	%			S	
Right	6	40.0		26.7	0.63	>0.05	NS	
Left	7	46.6	6	40.0	0.53	>0.05	NS	
Bilateral	2	13.3	5	33.7	1.63	< 0.05	S	

Table (7) Side of Pain in the head according to Acupuncture Thereby Chart4 There was statistically significance in bilateral pain in the patients who treated by somatic acupuncture.



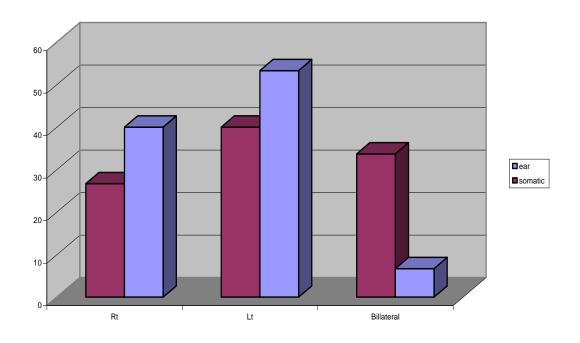


Fig. (55) chart 4 : Side of pain according to ACUP.



Acup th	Ear		Soma	tic
1 st Session	No	%	No	%
Between	12	80.0	13	86.6
During	3	20.0	2	13.3
Total 30 pt	15	100	15	100
Z	2.32		2.5	,
P	< 0.05		< 0.05	
Specificity	significan	nce	signifi	icance

Table (8) 1st Session of Acupuncture Thereby Chart 5 There was statistically insignificance in the migraine without aura and with aura.

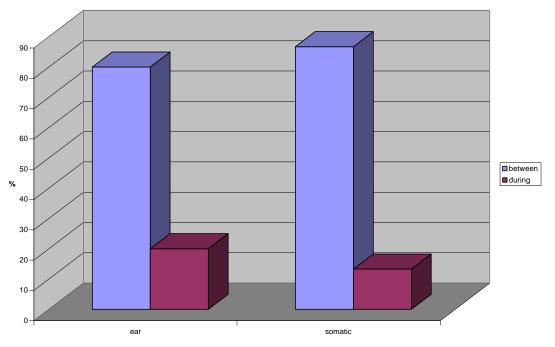


Fig. (56) Chart 5: 1st session of ACUP (Ear and Somatic)



Type properties Type	Without aura N = 17	With aura N = 13	Z	P
Sex (N / %)				
Female	9 (52.9%)	9 (69.2%)	0.57	>0.05
Male	8 (47.1%)	4 (30.8%)	0.7	>0.05
Bilateral	5 (29.4%)	2 (15.4%)	0.79	>0.05
Rt	5 (29.4%)	5 (38.5%)	0.43	>0.05
Lt	7 (41.2%)	6 (46.1%)	0.21	>0.05
Duration of attacks	11(64.7%)	4(30.8%)	1.3	
≤ 12 hours	6(35.3%)	9(69.2%)	1.3	>0.05
> 12 hours				>0.05
Frequency of attacks	4 (23.5%)	1 (7.8%)	1.05	
$\leq 2/\text{month}+$	7 (41.2%)	6 (46.1%)	0.21	>0.05
>2 ≤ 4/month++	6 (35.3%)	6 (46.1%)	0.47	>0.05
> 4/month+++				>0.05
Family history				
+ ve	6 (35.3%)	5 (38.5%)	0.14	>0.05
- ve	11 (64.7%)	8 (61.5%)	0.11	>0.05

Table (9) Comparison between migrainous patients with and without aura as regards age, sex, bilaterality, duration and frequency of attacks, and family history. Chart 6 ,7 There was statistically insignificant in criteria of migraine without aura and with aura.



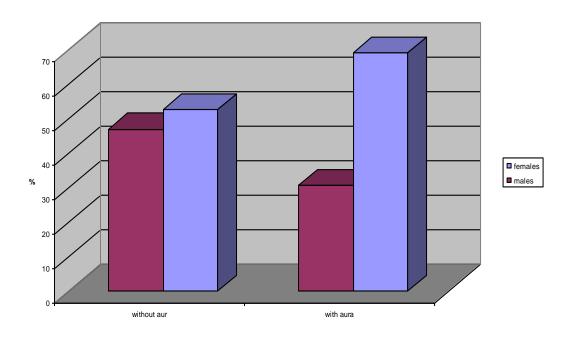


Fig. (57) Chart 6: Sex Distribution of cases with aura and without aura.

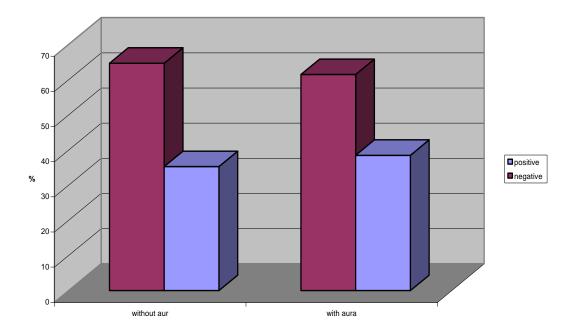


Fig. (58) Chart 7: Family history of cases with aura and without aura.



Migraine	Witho	ut aura	With	aura	Total			
Disability	No	%	No	%	No	%	Z	P
mild pain not inhibit routine activities (Grade I)	0	0.0	0	0.0	0	00.0		
moderate pain that limits routine activities (Grade II)	8	47.1	3	23.1	11	36.6	1.07	>0. 5
severe pain that forces the patient to bed (Grade III)	9	52.9	10	76.9	19	63.4	0.82	>0. 5
Total	17	100.0	13	100.0	40	100.0		

Table (10) migraine pain disability score and grading in all migraine patients There was statistically insignificant in migraine pain disability score between migraine without and with aura.





Clinical findings after Acupuncture treatment:

Fifteen patients were treated with Ear acupuncture 12 of them 1st session was in between attack and 3 of them during attack. other fifteen patients were treated with somatic acupuncture, 13 of them treated in between attack and 2 treated during attack (table 8).

Prodrome phase: Found in 20 patients . fifteen patients who treated by Ear (Group B) there were 5 patients (33.3%) not complained from prodrom and 10 patients (66.7%) complained from prodrome after 2 months of treatment the results showed that 8 patients (53.3%) became negative and 7 patients (46.7%) still complain. after 4months 12 patients (80%) became cured but still prodrom in 3 patients (20%) and continue complained after 6 months of treatment . while another 10 patients who treated with Somatic acupuncture (Group A) , after 2 months 6 patients (40%) became negative and after 4 months 10 patients (66.6%)were cured from prodrom stage , 5 patients (33.3%) still complain and also continue after 6 months from our results showed no statically significance between patients treated with ear and somatic. (table 11) but still the ear acupuncture is excel than somatic acupuncture in treatment prodrome .And generally acupuncture results whether Somatic or Ear in treatment of prodrome phase of migraine is satisfied (55%).



Асир	Ear		Somati	c	Tota	ıl	Chisq	P	
	No	%	No	%	No	%	_		S
Before									
- ve	5	33.3	5	33.3	10	33.3			
+ ve	10	66.7	10	66.7	20	66.7			
2 months									
- ve	8	53.3	6	40.0	14	46.7	0.53	>0.05	NS
+ve	7	46.7	9	60.0	16	53.3	0.5	>0.05	NS
4 months								>0.05	NS
- ve	12	80.0	10	66.6	22	73.3	0.43	>0.05	NS
+ve	3	20.0	5	33.3	8	26.7	0.71		
6 months									
- ve	12	80.0	10	66.6	22	73.3	0.43	>0.05	NS
+ve	3	20.0	5	33.3	8	26.7	0.71	>0.05	NS

Table (11) Follow up of prodrom before and after Ear and Somatic Acupuncture Thereby chart 8 There was statistically insignificant between ear and somatic in treatment of prodrom along course of therapy.



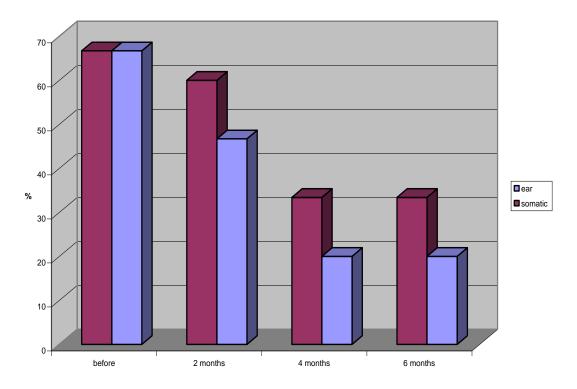


Fig. (59) Chart 8: Positive prodrom before and after ACUP at different time

Aura phase: The fifteen patients who treated by Ear acupuncture9 patients (60%) not complained from aura, 3 patients (20%) were mild and other 3 patients (20%) were sever after 2 months from treatment the results showed that 10 patients (66.7%) became negative, 4 patients (26.7%) became mild and still one patient complaining from sever aura(6.7%) after 4 months 13 patients (86.7%) were complete cure and 2 patients (13.3%) still complained from mild aura. fifteen patient who treated with Somatic acupuncture (Group A), 8 patients (53.3%) were not complaining from aura, 4 (26.7%) patients complained from mild aura and 3 patients (20%) complained sever attack of aura. after 2 months of thereby the results were showed no any cure nor improvement in patients. after 4 months, 10 patients (66.7%) were complete cure and



5 patients (33.3%) became mild .these results indicated that Ear acupuncture thereby was more cure and rapid than Somatic thereby but without statically significance (table 12)

Acup	Ear		Somatic	,	Total				
Auro	No	%	No	%	No	%	Chisq	P	S
Before									
neg	9	60.0	8	53.3	17	56.7	0.47	>0.05	NS
mild	3	20.0	4	26.7	7 23.3				
sever	3	20.0	3	20.0	6	20.0	1.07	>0.05	NS
2 months									
neg	10	66.7	8	53.3	18	60.0	0.47	>0.05	NS
mild	4	26.7	4	26.7	8	26.7			
sever	1	06.7	3	20.0	4	13.3	1.07	>0.05	NS
4 months									
neg	13	86.0	10	66.6	23	76.6	0.43	>0.05	NS
mild	2	13.3	5	33.3	7	23.3	0.71	>0.05	NS
sever	0	0.00	0	0.00	0	0.00			
6 months									
neg	13	86.0	10	66.6	23	76.6	0.43	>0.05	NS
mild	2	13.3	5	33.3	7	23.3	0.71	>0.05	NS
sever	0	0.00	0	0.00	0	0.00			

Table (12) Follow up of Aura before and after Ear and Somatic Acupuncture Thereby There was statistically insignificant between ear and somatic in treatment of aura along course of therapy. Chart 9



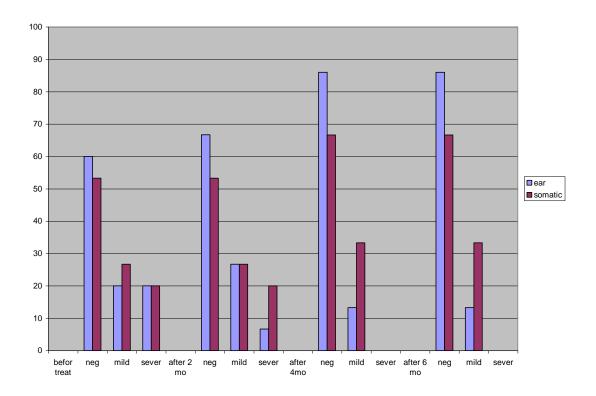


Fig. (60) Chart 9: Positive Aura before and after ACUP at different time

Headache phase: From the follow up of duration ,frequency and intensity of headache attack we found that some patients were completely cured , another patients improved this by attacks became infrequent or less duration decreased intensity . The results of follow up of headache phase in the 1st 2monthes indicated that Ear acupuncture was more rapid in treatment than Somatic acupuncture that 3 patients were completely cured when treated by Ear acupuncture in the 1st 2 month No(6,13,19). 8 patients were improved. While somatic acupuncture was limited on mild improvement 6 patients No(2, 5,9,21,27,28) there was a statically significance this due to long duration of session of Ear acupuncture.

The follow up after treatment 4 months found that in Ear acupuncture, another 3 patients were cured No(1, 23,30) so became 6 patients were complete cured and one patient improved No(8) to became 6 patients. While in somatic after 4 months one patient was completely cured not



improved in 1st 2 months No (16), one patient continue improved to reach cured after 4 months No (27), so became 2 patients were completely cured ., 4 patients started improvement No (10,18,20,24) and patients No (2, 5,9,28) not showed any improvement after 4 months.

The follow up after 6 months of treatment found that another 5 patients of Ear acupuncture were completely cured No (3,12,14,17,26) so became net results 11 patients were completely cured ,. While in Somatic acupuncture the cases No (5, 10, 21) reached to completely cured to became 5 patients. Case No (2, 18, 20, and 24) continue improvement to reached 6 patients and 4 patients failed to be improved. Table (13).



Acup	Ear		Somatic				
headache	No	%	No	%	Z	P	S
2 months							
Cured	3	20.0	0	0.00	1.83	< 0.05	S
Improved	8	53.3	6	40.0	0.58	>0.05	NS
Failed	4	26.7	9	60.0	1.39	>0.05	NS
4 months							
Cured	6	40.0	2	13.3	1.41	>0.05	NS
Improved	6	40.0	9	60.0	0.77	>0.05	NS
Failed	3	20.0	4	26.7	0.38	>0.05	NS
6 months							
Cured	11	73.07	5	33.3	1.6	< 0.05	S
Improved	1	6.7	6	40.0	1.67	< 0.05	S
Failed	3	20.0	4	26.7	0.38	>0.05	NS

Table (13) Follow up of Acupuncture Thereby (Ear and Somatic) Chart 10. There was statistically significant in cured migraine headache by ear acupuncture after 2 months of therapy, statistically insignificant in cured and improvement between ear and somatic after 4 months of treatment. There was statistically significant in improvement patients from migraine headache by ear acupuncture therapy after 6 months of treatment.



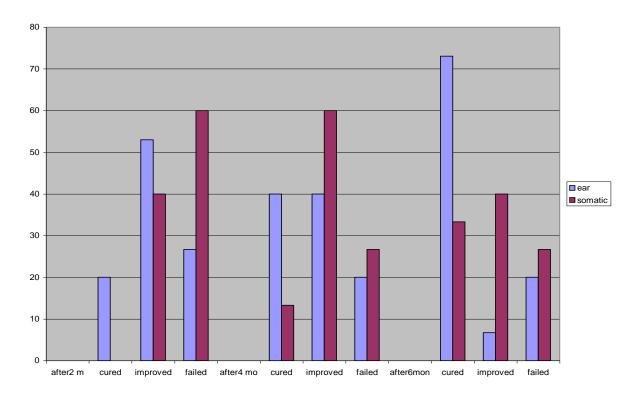


Fig. (61) Chart 10: Follow up of headache phase after ACUP at different time

Postdrome phase: Found in 22 cases. fifteen patients who treated by Ear (Group B) there were 4 patients (26.7%) not complained from postdrom and 11 patients (73.3%) complained from postdrome after 2 months of treatment the results showed that 10 patients (66.7%) became negative and 5 patients (33.7%) still complain. after 4months 11 patients (73%) became cured but still prodrom in 4 patients (26.7%) and after 6 months of treatment 13 patients (86.7%) became cured and 2 patients (13.3%) still complained while another 11 patients who treated with Somatic acupuncture (Group A), after 2 months 6 patients (40%) became negative and after 4 months 7 patients (46.7%)were cured from

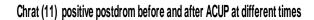




pstdrom stage, 8 patients (53.3%) still complain and also continue after 6 months from our results there was a statically significance between Ear and somatic thereby at +ve postdrom after 4 and 6 months of treatment (table 14).

Acup	East		Somati	c	Т.4.	,	China	P	C
	Ear No	%	No	%	Tota No	%	Chisq X2		S
Before							242		
- ve	4	26.7	4	26.7	8	26.7			
+ ve	11	73.3	11	73.3	22	73.3			
2 months				,					
- ve	10	66.6	6	40.0	16	53.3	1	>0.05	NS
+ ve	5	33.3	9	60.0	14	46.7	1.07	>0.05	Ns
4 months									
- ve	11	73.3	7	46.7	20	66.7	1.15	>0.05	NS
+ ve	4	26.7	8	53.3	10	33.3	1.53	< 0.05	S
6 months									
- ve	13	86.7	7	46.7	20	66.7	1.34	>0.05	NS
+ ve	2	13.3	8	53.3	10	33.3	1.9	< 0.05	S

Table (14) Follow up of Postdrom before and after Ear and Somatic Acupuncture Thereby Chart 11 There was statistically significant in +ve postdrom in patients who treated by somatic acupuncture after 3-4,4-6 months from therapy.



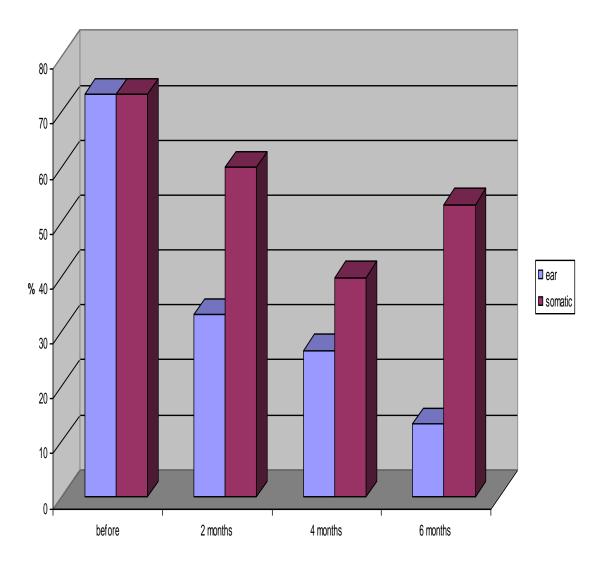


Fig. (62)Chart 11: positive postdrom before and after ACUP treatment



Master sheet

					BEF	ORE	TREAT	MENT	1		AC	CUP TH	Al	FTE 7	ΓREA	TME(6	mont	Γ3)	
N	A	S	Pr	A		Н	EADAC	HE		Po	т	1St	Pr	A	Н	EADAC	HE	Po	RES
			Pr	Au	Lat	Int	Dura	Fre	Тур	Po	Ту	Sess	Pr	Au	Int	Dur	Fre		
1	45	f	+	++	Un Rt	3	D1-7	+++	thr	+	Ea	Bet	-	-	0	-	-	-	cured
۲	٣٥	f	+	-	Un Rt	۲	D1-7	+++	thr	+	So	Bet	-	-	۲	1-3Hr	++	+	improve
٣	60	f	-	-	Un Lt	٣	H^-7	++	thr	+	Ea	Bet	-	-	0	-	-	-	cured
٤	٥٢	f	+	+	Bi	3	D۳-۱	++	thr	+	Ea	Bet	+	+	٣	D4-1	++	+	Fail
0	70	m	+	-	Un Lt	٣	H7-0	+++	thr	-	So	Bet	-	-	-	-	-	-	cured
٦	7.7	f	+	-	Un Lt	٣	Н٤-٣	+++	stap	+	Ea	Dur	-	-	•	-	-	-	cured
٧	49	m	+	-	Un Lt	۲	Do-4	++	thr	+	So	Bet	+	-	۲	1-2D	++	+	Fail
٨	٣.	f	+	+	Un Lt	٣	D4-1	+++	thr	-	Ea	Bet	-	+	۲	H٣-٢	+	-	Improve
٩	70	f	-	++	Un Lt	٣	۳-۳ ۲H	++	thr	+	So	Dur	-	+	١	H7-1	+	-	Improve
10	77	m	+	-	Bil	۲	Mn۳۰	+	stap	+	So	Bet	-	-	•	-	-	-	Cured
11	۲۸	f	+	-	Un Rt	٣	D7-1	++	thr	-	Ea	Bet	+	-	٣	D4-1	++	-	Fail
12	٤٥	f	-	++	Un Lt	٣	30Mn	+++	stap	+	Ea	Dur	-	-	•	-	-	-	Cured
13	٤٨	f	-	-	Un Lt	۲	H7-0	++	thr	+	Ea	Bet	-	-	•	-	-	-	Cured
14	42	m	+	++	Un Rt	٣	1D ^۲ -	++	thr	-	Ea	Bet	-	-	•	-	-	-	Cured
15	۲٥	m	+	+	Bil	۲	D4-4	++	stap	+	So	Bet	+	+	۲	D7-1	++	+	Fail
16	٣٤	f	+	+	Un Rt	۲	D4-1	++	thr	-	So	Dur	-	-	•	-	-	-	cured





17	٣٣	m	+	-	Un Lt	٣	Н0-٣	+++	stap	+	Ea	Bet	-	-	0	-	-	-	cured
18	77	f	-	-	Bil	٣	D4-1	+	thr	+	So	Bet	-	-	۲	H7-1	+	+	Improve
19	٤٢	f	-	-	Un Rt	٣	Н∘- ٤	+++	thr	+	Ea	Bet	-	-	0	-	-	-	cured
20	٣٤	m	-	++	Un Rt	۲	Dr-1	++	thr	+	So	Bet	-	+	١	Н°- ε	+	+	Improve
21	۲۸	f	+	-	Un Lt	۲	2-1D	++	Dul	-	So	Bet	-	-	•	-	-	-	Cured
22	٣٦	m	+	-	Bil	۲	D4-1	++	stap	+	Ea	Bet	+	-	٣	2-1D	+++	+	Fail
23	٤٢	m	+	-	Un Rt	٣	Н°- ε	+	thr	+	Ea	Dur	-	-	•	-	-	-	cured
24	77	f	+	++	Un Lt	٣	Н٩-٨	+	stap	+	So	Bet	+	+	١	H ₄ -1	+	+	Improve
25	٣٧	m	-	-	۲ Bil		H ₄ -1	++-	stap	+	So	Bet	-	-	۲	H4-1	++	+	Fail
26	٤٩	f	-	+	Un Lt	٣	Н∘- ٤	+++	thr	+	Ea	Bet	-	-	٠	-	-	-	Cured
27	77	m	-	-	Bil	٣	D٣-٢	+	stap	-	So	Bet	-	-	•	-	-	-	Cured
28	٤٠	f	+	+	Un Rt	٣	Η٤-٣	+++	thr	+	So	Bet	+	+	۲	-2H1	++	+	Improve
29	٣٩	m	+	+	Un Lt	٣	D4-1	+++	thr	+	So	Bet	+	+	٣	DY-1	+++	+	Fail
30	٣٨	f	+	-	Un Rt	۲	H٦-0	+++	thr	-	Ea	Bet	-	-	•	-	-	-	cured

N = Name A = Age S = Sex

Pr = Prodrom Au = Aura Lat = Laterality

Int = Intensity Dura = Duration Fre = Frequency

Ty = Type Po = Postdom $1^{St} sess = 1^{St} session$





Fol = Follow up Res = Result

Fail = Failed Un =Unilateral

Bil = Bilateral D = Day H = Hours

Mn = Minutes Thr = Throbbing Stap = Staping

Ea = Ear So = Somatic Acu Th = Acupuncture Therapy

Bet = Between Attack Dur = During Attack

T3 = Complete course therapy (6 Months) 0 = No pain

 $\{ '= Mild pain$ 2 = Moderate pain that limits routine activates

3 = Moderate to Sever pain that force the patient the Patient to bed 4 = Sever pain } according to The Migraine Disability Assessment (MIDAS) questionnaire

Frequency of attacks +++:>4 / month

Frequency of attacks $++: > 2 \le 4$ / month

Frequency of attacks + : ≤ 2 / month