|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
|  | **EEG findings changes** | P value | **Seizure frequency before drug therapy** | P value | **Seizure frequency after drug therapy**  | p value |
| No change/ Deteroation | Improvement between %50-100 | **No seizure/ Single seizure** | **One or more in a month** | **One or more in a week/ Everyday** | **No seizure/ Single seizure** | **One or more in a month** | **One or more in a week/ Everyday** |
|  | n (%) | n (%) |  | n (%) | n (%) | n (%) |  | n (%) | n (%) | n (%) |  |
| **Clinical stage** |
| Stage 1  | 4 (40,0) | 6 (60,0) | 0,301 | 8 (53,3) | 1 (6,7) | 6 (40,0) | **0,005** | 10 (66,7) | 2 (13,3) | 3 (20,0) | NA |
| Stage 2 | 13 (39,4) | 20 (60,6) | 27 (52,9) | 15 (29,4) | 9 (17,6) | 31 (60,8) | 16 (31,4) | 4 (7,8) |
| Stage 3 | 16 (55,2) | 13 (44,8) | 14 (40,0) | 8 (22,9) | 13 (37,1) | 19 (54,3) | 6 (17,1) | 10 (28,6) |
| Stage 4 | 11 (64,7) | 6 (35,3) | 4 (21,1) | 2 (10,5) | 13 (68,4) |  | 4 (21,1) | 3 (15,8) | 12 (63,2) |  |
| **Clinical type** |  |  |  |  |  |  |  |  |  |  |  |
| Atypical | 14 (56,0) | 11 (44,0) | **0,439** | 19 (52,8) | 6 (16,7) | 11 (30,6) | 0,438 | 22 (61,1) | 6 (16,7) | 8 (22,2) | 0,486 |
| Typical | 30 (46,9) | 34 (53,1) | 34 (40,5) | 20 (23,8) | 30 (35,7) |  | 42 (50,0) | 21 (25,0) | 21 (25,0) |  |
| **Genetic mutation type** |
| MECP2 | 39 (47,6) | 43 (52,4) | 0,266 | 49 (44,1) | 24 (21,6) | 38 (34,2) | NA | 60 (54,1) | 24 (21,6) | 27 (24,3) | NA |
| Other mutation type | 5 (71,4) | 2 (28,6) | 4 (44,4) | 2 (22,2) | 3 (33,3) | 4 (44,4) | 3 (33,3) | 2 (22,2) |
| **First EEG** |
| Normal | 8 (57,1) | 6 (42,9) | 0,530 | 14 (60,9) | 1 (4,3) | 8 (34,8) | **0,057** | 48 (49,5) | 24 (24,7) | 25 (25,8) | 0,215 |
| Epileptic activity (Focal/Generalize/Multifocal) | 36 (48,0) | 39 (52,0) | 39 (40,2) | 25 (25,8) | 33 (34,0) | 16 (69,6) | 3 (13,0) | 4 (17,4) |
| **Seizure duration after drug therapy**  |
| Yes | 23 (40,4) | 34 (59,6) | **0,022** | 15 (24,2) | 21 (33,9) | 26 (41,9) | **<0,001** | 25 (40,3) | 20 (32,3) | 17 (27,4) | **0,007** |
| No | 21 (65,6) | 11 (34,4) | 38 (65,5) | 5 (8,6) | 15 (25,9) | 39 867,2) | 7 (12,1) | 12 (20,7) |
| **Change in seizure semiology after drug therapy** |
| Yes | 12 (54,5) | 10 (45,5) | 0,581 | 1 (4,3) | 5 (21,7) | 17 (73,9) | **<0,001** | 2 (8,7) | 7 (30,4) | 14 (60,9) | **<0,001** |
| No | 32 (47,8) | 35 (52,2) | 52 (53,6) | 21 (21,6) | 24 (24,7) | 62 (63,9) | 20 (20,6) | 15 (15,5) |
| **Cognitive impairment after medication** |
| Yes | 5 (45,5) | 6 (54,6) | 0,778 | 5 (45,5) | 1 (9,1) | 5 (45,5) | NA | 6 (54,5) | 0 (0,0) | 5 (45,5) | NA |
| No | 39 (50,0) | 39 (50,0) | 48 (44,0) | 25 (22,9) | 36 (33,0) |  | 58 (53,2) | 27 (24,8) | 24 (22,0) |

\*Fisher's Exact Test and p<0.05 Significance level, NA:not available

**Table-1** . Comparison of the data before and after initiation of anti-seizure medications is given in Table-1.