**Supplementary material 1: Flow chart of the study according to the CONSORT statement**

Assessed for eligibility (n=41)

* Excluded (n=17)
* Dropped out after initial assessment (n=5)

Allocation

Allocated to active dTMS intervention (n=19)

* Received 10 sessions of high frequency active dTMS (n=15)
* Dropped out before completing 10 sessions (n=4)

Assessment & Analysis

* Assessment done on Y-BOCS, HAM-A & HAM-D at baseline and after 10sessions of dTMS (n=15)
* fMRI done at baseline and after 10 sessions of dTMS
* Analysed (n=15)

**Supplementary Material 2: Details of the drug treatment of the study participants**

|  |  |
| --- | --- |
| Patient Number | Drugs with Dosages |
| 1  2  3  4  5  6  7  8  9  10  11  12  13  14  15 | Sertraline 200mg, Buspirone 10mg  Fluoxetine 60mg  Fluoxetine 60mg, Clomipramine 75mg  Sertraline 200mg, Fluvoxamine 150mg  Fluoxetine 80mg, Clomipramine 100mg  Paroxetine 25mg  Sertraline 100mg  Fluvoxamine 200mg, Clomipramine 50mg  Fluvoxamine 100mg  Fluoxetine 80mg, Clomipramine 50mg  Fluoxetine 40mg  Clomipramine 125mg  Fluoxetine 60mg, Lorazepam 4mg  Fluoxetine 80mg  Fluvoxamine 150mg, Clonazepam 0.25mg |

**Supplementary material 3: Regions showing decreased activation during the Stroop task post dTMS**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Region | Number of Voxels | *x* | *y* | *z* |
| Left caudate | 36 | -24 | -2 | 30 |
| Left cerebellum | 20 | -16 | -30 | -32 |
| Right cerebellum | 12 | 18 | -26 | -32 |
| Left SMA | 8 | 0 | -12 | 48 |
| Left PrG | 6 | -30 | -24 | 52 |

Random effects mode, paired-samples t-test, p<.0001, uncorrected. SMA- supplementary motor area,

PrG- precentral gyrus