**Blood Levels of Sertraline in Patients with Treatment- Refractory Obsessive-Compulsive Disorder (OCD)**

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**Abstract:**

**Background:**

Research has repeatedly demonstrated that patient with OCD usually require higher dosages of Serotonin Reuptake Inhibiting drugs than is necessary for the treatment of depression (reference). This observation resulted in treatment- refractory patients being occasional prescribed selective SRI drugs above the normal upper limit of prescribing. Pampaloni et al. (2010) conducted a study on a group of treatment refractory OCD patients and found that these high doses were well tolerated led to clinical improvement.

We decided to investigate the blood levels of patients on dosages of sertraline that were above the normal therapeutic range.

**Methods**

Successive patients treated by the National Inpatient Service for OCD/BDD based in South West London and St George’s NHS Trust were entered into the study if they were treatment refractory and were prescribed dosages of sertraline in excess of the normal dose of 200mg per day. . This Unit has been described elsewhere (Drummond et al., 2012). All of the patients had previously received at least two trials of different SRIs for a minimum of 3 months each without any resolution of symptoms. In addition, all patients had been offered augmentation with a dopamine blocker and also at least 2 trials of Exposure and response-prevention.

Patients who were initially unresponsive to 200mg Sertraline had their daily doses titrated upwards in 50mg increases every 2-4 weeks up to a maximum of 400mg (depending on efficacy and any side effects). Blood samples were taken shortly after their morning dose had been administered. This was after the patients had stabilised for at least 2 weeks on the higher doses.

**Results**

Despite these treatments, all patients were admitted to the service with a Yale-Brown Obsessive Compulsive Score( YBOCS) within the high end of the “profoundly ill” range (>35/40).

17 patients were included in the study. Blood levels of Sertraline were found to be in therapeutic range for all patients. In general, the blood levels remained within the lower half of normal reference range despite being prescribed supra-normal Sertraline dosages ranging from 225mg to 400mg per day.

Following treatment within the service, these patients generally showed an improvement of an average of improvement of 43% on the YBOCS.

**References:**

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