Fluvoxamine

C Lindsay DeVane

Medical University of South Carolina, Charleston SC, USA

The experience of anxiety at a level that results in dysfunction appears to be an historical phenomenon accompanying cultural development. Homer's fictional histories describe the streets of Athens as filled with soldiers bearing the mental, as well as physical, wounds of war. Obsessions and hand-washing rituals were immortalized by Shakespeare in the character of Lady Macbeth. Modern epidemiology has characterized a staggering burden of anxiety disorders. Fortunately, the last several decades of psychopharmacology have been a time of major treatment breakthroughs. The development of the selective serotonin reuptake inhibitors (SSRIs) has had a profound effect on the treatment of both depression and anxiety disorders. These are safe and effective medications with evidence-based support from randomized controlled trials for their use across the life span from adolescence to late life.

It is remarkable that a drug first registered for the treatment of depression, fluvoxamine, should eventually be proven effective for treatment of all the major DSM-IV anxiety disorders. Fluvoxamine is well established in the treatment of obsessive compulsive disorder (OCD) in adults and children, and shows efficacy in its eastern equivalent taijin kyofusho. Recent studies also show good efficacy in social anxiety disorder (SAD) in adults and children. Like the other SSRIs, there is somewhat less evidence available for efficacy in panic disorder, but fluvoxamine has significant advantages over the benzodiazepines in day-to-day usage. Whilst improvements have been shown in patients with post-traumatic stress disorder, this illness continues to prove more refractory to pharmacological intervention than most anxiety disorders. Fluvoxamine shows efficacy in the group of illnesses some have characterized as the obsessive-compulsive spectrum disorders. Such disorders include a number of eating disorders, pathological gambling, body dysmorphic disorder, and even compulsive shopping. Although the methodology of some of the trials is imperfect, this is a large group of related disorders for which fluvoxamine may have utility.

Fluvoxamine has a benign safety profile in all age groups, from children to the very elderly. Fluvoxamine's efficacy and benign safety profile in children and adolescents should reassure prescribers about the use of this SSRI in young people. This is particularly important since OCD and SAD frequently make their first appearance in children and adolescents, and prescribers need treatments that can be used effectively and safely in these young patients. Fluvoxamine is very safe in overdose (even in concomitant overdose with other drugs) and is associated with a low incidence of suicidality. When compared with other treatment options for anxiety disorders, it causes markedly fewer cardiovascular, anticholinergic, and cognitive side effects than the tricyclic antidepressants and it lacks the cognitive impairment and dependence susceptibility of the benzodiazepines. Although it demonstrates a similar overall tolerability profile to the other SSRIs, causing mainly gastrointestinal complaints, it has benefits over other members of this class with respect to sexual side effects, cognitive and sleep disturbance, change in body weight, and the appearance of withdrawal syndrome.

Although fluvoxamine should be used with caution in patients with hepatic impairment and those using drugs metabolized by cytochrome 1A2 (and to a lesser extent cytochrome P3A4 and cytochrome P2C19), its use in patients with renal impairment and in the young and old is uncomplicated, although gradual titration is to be favored in very elderly patients.

While a drug's pharmacokinetics vary across patients, its pharmacologic actions should remain constant. This fact underscores the need for support of basic scientific inquiries into the pharmacology of our most useful medicines. These investigations can provide insight into the pathophysiology of psychiatric causes of disability and suggest new molecular targets for drug development. In this regard, fluvoxamine and other SSRIs have served as valuable tools to probe the serotonergic neuronal systems. In conjunction with functional neuroimaging and pharmacogenetic inquiry, we can expect further progress in the future to improve the quality of life of persons susceptible to, experiencing, or recovering from, mental illness. While we may not fully understand the reasons why fluvoxamine is such an effective agent in reducing anxiety, we can be comforted that substantial evidence, as summarized in the present review, is available to support its use as contemporary pharmacotherapy.