Introduction

Reboxetine: A New Selective Antidepressant for the Treatment of Depression

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Depression is a common and disabling order. Recent World Health Organization reports have shown that depression has major effects on economic productivity and individual well-being and social functioning, around the globe, not merely in developed countries. The success of the serotonin selective reuptake inhibitors (SSRIs) has greatly expanded the scope of treatment of depression by increasing compliance with therapy. However, a body of evidence suggests that serotonin and norepinephrine may be involved in different subtypes of depression. Thus, antidepressants acting on the noradrenergic system may benefit a certain subgroup of patients.

Reboxetine, a new antidepressant drug, is a unique norepinephrine reuptake inhibitor (selective NRI). It is highly selective with weak affinity for serotonin or dopamine uptake sites and little affinity for muscarinic or adrenergic receptors, and thus provides a tool for studying the role of norepinephrine in depression. Reboxetine is an effective and well-tolerated antidepressant, with a unique place in the treatment of the depressed patient.

Extensive research to determine the biological substrates of depression has produced some important insights into possible subtypes of depression. The effects of reductions in brain monoamines in depressed patients, patients who are in remission, and those receiving noradrenergic or serotonergic antidepressants have yielded interesting results. They suggest that possible biological probes could be developed to identify the best treatment for patients by determining whether their depression is serotonergic or noradrenergic in origin.

It has been argued that serotonin activity is associated with mood regulation, whereas norepinephrine is more closely related to drive and motivation. Indeed, studies with reboxetine and fluoxetine have revealed differences between antidepressant drugs in terms of their effect on social functioning. Specifically, reboxetine appeared to be more effective than fluoxetine in improving areas of social function related to motivation and negative self-perception.

Noradrenergic function may also be involved in psychomotor retardation. Investigation of the scales to measure psychomotor retardation shows they correlate closely with Choice Reaction Time and Simple Reaction Time, leading to the conclusion that cognitive slowing is a central feature of depression. The assessment of psychomotor retardation may be useful in distinguishing depression, requiring and responsive to antidepressant therapy, from nondepressive psychic pain.

Reboxetine, a unique selective noradrenergic antidepressant, may thus have a distinct place in the armamentarium of agents used to treat depression. In particular, its improved side effect profile over tricyclic antidepressants and its differential effects on social functioning compared with SSRIs make reboxetine a likely choice in the treatment of the depressed patient.

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