Cognitive enhancers

Ergot-derived cognitive enhancers

This remarkable fungus has proven itself to be a gold mine of medicinal treasures; Hydergine is only one of numerous drugs to be derived from ergot. Some of the other ergot-derived cognitive enhancers include the more potent pharmaceutical bromocriptine and the recently developed pharmaceutical nicergoline.

Bromocriptine

Bromocriptine is a dopamine receptor agonist, which activates dopaminergic neurons and mimics the effect of the excitatory neurotransmitter dopamine. It is the most potent of the ergot derivatives and although it is primarily used to treat Parkinson’s disease, it also has profound anti-aging effects because it enhances dopamine, which tends to decrease significantly with age. It also effects the pituitary gland production of the hormones prolactin and growth hormone (GH) in some very beneficial ways that appear to counteract some of the symptoms of aging.

Bromocriptine inhibits prolactin, which tends to increase with age, and it increases GH secretion, which tends to decrease with age. Although bromocriptine increases GH secretion in healthy individuals with normal GH concentrations, it actually suppresses GH production in people with a condition known as acromegaly, which causes excessive GH production. Studies indicate that bromocriptine does not affect the release of any other anterior pituitary hormones.

Prolactin is a single-chain protein hormone, closely related to growth hormone that stimulates the secretion of milk in women. Bromocriptine’s inhibition of this hormone makes it useful as a treatment to help restore ovulation in women. Men also release prolactin during orgasm, and this has the effect of reducing a man’s desire for more sex by preventing new erections. Although little
research has been done in this area, many people report that orgasms simply come easier on bromocriptine, and it is also known increase fertility.

Studies also indicate that bromocriptine is a potent antioxidant and it has been shown to help prevent and treat certain types of breast cancer. Other studies indicate that it suppresses lipogenesis (formation of excessive fat) and improves glucose tolerance and insulin resistance, making it a possible treatment for Type-II diabetes. Another study suggested that bromocriptine alters the hunger regulating mechanism in the brain, which suggests that it may also be useful as a dietary aid.

Bromocriptine is more potent than Hydergine and most people do well with a dosage of around 1.25 to 2.50 mg. per day.

Common side-effects during initial doses may include nausea, dizziness, and a lowering of blood pressure, although these side-effects tend to dissipate with repeated use. In some cases bromocriptine may cause hypotension or confusion, and it should never be used by pregnant or lactating women without the guidance of a physician. One should also seek the advice of a physician when combining bromocriptine with other ergot derivatives, or other dopamine-enhancing drugs, because they can significantly exaggerate bromocriptine’s effects.

Nicergoline

Like Hydergine, nicergoline is a vasodilator that improves blood flow to the brain and stimulates the use of oxygen and glucose. It also inhibits blood platelet aggregation and improves blood circulation in the arms, legs, and lungs. Nicergoline does not effect arterial tension, and it sometimes reduces tension in hypertensive patients.

It is used to treat migraine headaches that are of vascular origin and other problems of a vascular nature, such as dizziness and auditory
problems. It is also used to treat certain eye disorders, platelet aggregability, and arterial hypertension, as well as senile dementias.

A recent study in Italy showed that nicergoline can also have a neuroprotective effect. Researchers demonstrated that nicergoline protects cultured neurons against beta-amyloid toxicity, the major protein component of Alzheimer’s plaques.

Another study in Italy suggested that nicergoline may be beneficial in the prevention and treatment of side-effects from other drugs, such as the antipsychotic drug haloperidol. The chronic use of this powerful neuroleptic induces a significant decrease in the activity of the enzymes glutathione reductase, glutathione peroxidase, and superoxide dismutase in certain areas of the brain. When nicergoline is co-administered with haloperidol the activity of these enzymes is restored to levels comparable to those observed in control animals.

Haloperidol is a very powerful drug, with frequent side-effects, and is used primarily to treat psychosis. The efficacy of nicergoline to restore natural enzyme levels under such extreme pharmacological conditions suggests that this mighty ergot derivative has enormous potential to help restore neurochemical imbalances in the aging brains of healthy individuals.

An interesting study in Japan showed that nicergoline increased nerve growth factor in the brains of aged rats, but it had no significant effect in this regard upon the brains of younger animals. Other studies indicate that nicergoline can enhance glutamate re-uptake and protect the brain against a condition where there is too little blood flow called ischaemia. For these reasons it is believed that nicergoline offers protection against neurological disorders that may be due to blood, glucose, or oxygen deprivation.

Side effects from nicergoline sometimes include mild nausea and gastric disturbances, dizziness, hot flashes, and hypotension. Less common side effects that may occur at higher doses include agitation, bradycardia, and sweating. Since nicergoline is known to enhance
cardiac depressive effects it should never be used concurrently with alpha or beta receptor agonists, like Inderal, and people suffering from myocardial infarction, acute bleeding, or bradycardia should also avoid using nicergoline. For anti-aging preventative purposes most people do well with a dosage of 5 mg. once or twice a day. Nicergoline is also known to heighten the effects of drugs that produce hypotension, such as Hydergine and bromocriptine, so caution is advised if one is combining these drugs.

Sexual Enhancement

The ergot-derived pharmaceuticals have developed a reputation for sexual enhancement. Many people report aphrodisiac-like effects from Hydergine, bromocriptine, and nicergoline, which is likely due to their enhancement of the excitatory neurotransmitter dopamine in the brain. Raising dopamine levels is known to increase sexual arousal, but there may be other mechanisms operating as well. According to gerontologist and life extension researcher Ward Dean, M.D., “Anything that improves brain function is probably going to improve sexual functioning.”

Another libido-increasing, ergot-derived pharmaceutical, cabergoline, has especially interesting properties of sexual enhancement. Like bromocriptine, cabergoline inhibits the production of the hormone prolactin (which is produced by men at the moment of orgasm), only much more so. Its extreme inhibition of prolactin helps to prevent men from losing interest in sex after orgasm and it allows some men to experience multiple orgasms. Some men on cabergoline are able to have numerous orgasms in rapid succession.

Hydergine and Anti-aging

Hydergine and the other ergot-derived cognitive enhancers help to reverse many of the effects of age-related cognitive decline. These remarkable substances help to protect the brain and counteract many of the symptoms of aging—such as difficulty concentrating and memory loss.