Gamma Oryzanol: an Impressive, yet Underappreciated Natural Agent for the Treatment of Hot Flashes in Menopause

By James P. Meschino, DC, MS

The Changing Face of Menopausal Management

Recent reports indicate that hormone replacement therapy (a combination of estrogen plus progestin hormones) increases the risk of breast cancer by 26 percent, stroke by 41 percent, and heart attack by 29 percent.

These alarming statistics that emerged from the American Women’s Health Initiative trial have prompted doctors and patients alike to search for safer, alternative means by which to manage menopausal symptoms. In Europe and Japan, alternative measures to combat menopausal symptoms have already been in use for more than 40 years, and well-designed clinical trials have shown that natural supplements, such as black cohosh extract, soy isoflavones and gamma oryzanol, are effective interventions in the management of a host of bothersome menopausal symptoms.

Active constituents from black cohosh extract (triterpene glycosides) and soy isoflavones appear to act as phytoestrogens, imparting their estrogenic influences on various tissues to help compensate for the 90-percent decline in estrogen in a woman’s body that accompanies the menopausal years. However, gamma oryzanol, a less-appreciated natural substance, is able to greatly reduce the number and severity of hot flashes during the early and most troublesome stage of menopause, through an entirely different mechanism of action. Gamma oryzanol (esters of ferulic acid) is a growth-promoting substance found in grains, and is isolated from rice bran oil for use as a supplement. In 1970, gamma oryzanol was approved as a medicinal treatment to lower cholesterol and triglycerides in Japan. As far back as the 1960s, gamma oryzanol was shown to be effective in the treatment of menopausal symptoms, including hot flashes, and subsequent studies have supported these findings. Orally administered gamma oryzanol is converted in the body to free ferulic acid.

Clinical Application and Mechanism of Action of Gamma Oryzanol
1. **Menopausal symptoms** - Supplementation with gamma oryzanol (150 mg, twice per day) has been shown to reduce the secretion of leutinizing hormone (LH) by the pituitary gland and promote endorphin release by the hypothalamus.\textsuperscript{1} Hot flashes and other menopausal symptoms (profuse sweating, mood changes) result indirectly from the oversecretion of the leutinizing hormone, which is attempting to initiate the start of another ovulatory cycle. The lack of response by the immature egg cells in the ovaries in menopause results in an oversecretion of FSH and LH by the pituitary, contributing to the onset of hot flashes and related symptoms.\textsuperscript{1}

Clinical trials involving menopausal women and women who have had their ovaries surgically removed have revealed that 67-85 percent of women treated with gamma oryzanol have experienced a significant reduction in menopausal symptoms.\textsuperscript{1,2}

2. **Cholesterol and triglyceride** - lowering (hypolipidemic) effects - A number of clinical trials reveal that 300 mg per day of gamma oryzanol supplementation can lower cholesterol by 8-12 percent and triglycerides by approximately 15 percent in subjects with elevated lipid levels.\textsuperscript{1-3} Studies reveal that gamma oryzanol supplementation increases the conversion of cholesterol to bile acids, increases bile acid excretion, and inhibits the absorption of cholesterol from the intestinal tract to the bloodstream.\textsuperscript{1,2}

These are important considerations for postmenopausal women, as heart disease is the most common cause of death in women over 50 years of age in North America. The decline in circulating estrogen levels with menopause predisposes postmenopausal women to a rise in blood cholesterol and the development of atherosclerosis. This is, in part, due to the fact that estrogen increases the number of LDL-cholesterol receptors on body cells, enabling them to more efficiently remove cholesterol from the bloodstream.\textsuperscript{1,2}

**Dosage of Gamma Oryzanol**

Menopausal symptoms / Hypolipidemic effects - 300 mg per day, taken in two divided doses (150 mg, twice per day).

**Adverse Side Effects and Toxicity**

Toxicity studies on animals demonstrate that gamma oryzanol is a very safe compound. No significant side-effects have been reported in human trials at the above noted recommended dosage.\textsuperscript{1,2,16}
Drug Nutrient Interactions

There are no reported drug-nutrient interactions for gamma oryzanol.¹

Conclusion

Health practitioners are being called upon to recommend safe and effective alternatives to hormone and estrogen replacement therapy. A detailed review of the worldwide evidence suggests that black cohosh extract, soy isoflavones and gamma oryzanol are the most thoroughly researched and widely recognized natural agents that alone, or in combination, are able to significantly reduce menopausal symptoms and help reduce risk of other conditions, such as osteoporosis, heart disease and breast cancer, common problems in the postmenopausal years. Of these natural agents, gamma oryzanol is the least known, but health practitioners should be made aware of its proven abilities to contain menopausal symptoms and reduce cholesterol and triglyceride levels, and be assured that it has a long history of use and an impressive safety profile. As such, gamma oryzanol deserves strong consideration as part of a wellness program designed for the postmenopausal patient.

References


Please take time to listen to Dr. Meschino’s interviews on ChiroWeb.com. The subjects of the first three are: *Combining Traditional, Complementary and Natural Interventions, The Benefits of Melatonin, and Using Natural Remedies to Manage Women’s Health Issues*. Each interview is packed with important information available to you and your patients. You can listen to the interviews at [www.chiroweb.com/audio/meschino](http://www.chiroweb.com/audio/meschino).

There is a link on the directory page for your feedback.

*James Meschino,DC,MS*

*Toronto, Ontario*

*Canada*

[www.renaisante.com](http://www.renaisante.com)

Click [here](http://www.renaisante.com) for more information about James P. Meschino, DC, MS.