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ROSEHIP AND ITS HEALING PROPERTIES

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ABSTRACT:

Rosehips containing a certain type of galactolipids have a specific anti-inflammatory effect. Rosehip Standard Powder has been formulated to maximize phytochemical retention. This powder has shown antioxidant and anti-inflammatory activity as well as clinical benefits in conditions such as osteoarthritis, rheumatoid arthritis, and inflammatory bowel disease.

Keywords: Rosehip, flavonoids, carotenoids.

INTRODUCTION:

Rose hips are the berry fruits of the rose hips or rose hips (Rosa canina L), a variety of rose hips native to Europe, Northwest Africa and Western Asia.

Rosehip has traditionally been used to treat a number of conditions, including diarrhea, bladder infections, and diabetes. For food, rose hips are used in teas, jams, jellies and soups, as well as as a natural source of vitamin C. The content of vitamin C in fresh rose hips is higher than in citrus fruits. Rosehip is also rich in folate and contains vitamins A, B3, D and E, as well as flavonoids, carotenoids, beta-sitosterol, fructose, malic acid, tannins, magnesium, zinc, copper and many other phytochemicals, including the recently characterized galactolipids.

These nutrients can be depleted or destroyed during processing, and phytochemicals have been shown to be dependent on the ripeness of the fruit, as well as drying time, drying air temperature and moisture content.

A team from the Department of Clinical Biochemistry at the University of Copenhagen in Denmark has been researching and testing rose hips for over a decade. This research focused on a specific rosehip powder manufactured by Hyben Vital, Denmark.

The production process involves plants grown according to good agricultural practices in standard fields in Denmark and Sweden. The fruits are harvested when they are fully ripe and the optimal fruits are selected using laser technology.9 This patented process preserves the nutrient content and the resulting powder is standardized to contain at least 5 mg / g vitamin C. and shells.

The standardized extract has been available in Scandinavia for over a decade as an herbal remedy.9 It is now readily available in Australia and New Zealand under the brand name Rose-Hip Vital.

OSTEOARTHRITIS, RHEUMATOID ARTHRITIS:

The first randomized controlled trial of rose hips included 100 patients with painful, radiologically confirmed osteoarthritis of the hip or knee. These patients, some of whom were in the end-stage and awaiting joint replacement, were randomized to receive either 2.5 g of standardized rosehip powder or placebo twice daily for 4 months. The results

showed that compared to placebo, rosehip powder significantly reduced pain (p = 0.035), with 64.6% of patients receiving rosehip reporting some pain relief. Patients treated with rosehip also showed improvement in hip flexion (p = 0.033), with no significant changes observed for internal and external hip rotation or knee flexion.

A second double-blind, placebo-controlled, crossover study of 112 patients with osteoarthritis of the hip, knee, hand, shoulder, or neck showed that, compared with those who received a placebo, patients who received 5 g / day of standardized rosehip powder for 3 months, experienced significant reductions in pain (p <0.0078) and stiffness (p <0.0025), as well as significant improvements in mood, well-being, and sleep quality. Sixty-six percent of patients receiving active treatment reported a reduction in pain compared to 36% of patients receiving placebo. There was also a decrease in plasma paracetamol and CRP consumption along with a small but significant decrease in total cholesterol. After the treatment and placebo groups were combined for the next 3 months (no washout period), no differences were observed between the two groups, suggesting that rose hips have a long duration of action with a strong carryover effect.

A third placebo-controlled, double-blind, crossover study in 94 patients over 35 years of age with osteoarthritis of the hip or knee, randomized to receive placebo or 5 g / day or rose hips for 3 months. Compared to placebo, rosehip treatment resulted in significant reductions in WOMAC pain (Osteoarthritis Index of Western Ontario and McMaster Universities) (+/−) and rescue medication consumption at 3 weeks, as well as significant reductions in disability, stiffness and overall WOMAC score ... the severity of the disease after 3 months of treatment.

In addition to benefits for osteoarthritis patients, rose hips may also benefit other conditions such as back pain and rheumatoid arthritis. A yearly follow-up of 152 patients showed that rose hips provided significant pain relief in patients with exacerbations of chronic back pain. More recently, a 6-month, double-blind, placebo-controlled study also found modest benefits in patients with rheumatoid arthritis, as indicated by significant improvements in the Health Questionnaire Disability Index (HAQ-DI) score, as well as various other scales reported by patients. and doctors. The authors concluded that although the results were promising, this study was not powerful enough and larger studies are needed.

The slow onset of action, moderate effect size, and lack of statistical power may explain the results of a more recent and much smaller open-label case-control study of 20 patients with rheumatoid arthritis and 10 control women who found no significant effect on clinical symptoms. , CRP level or laboratory measurements of antioxidant enzyme activity after 4 weeks of treatment with 10.5 g / day of rosehip powder.

Meta-analysis and systematic reviews

A meta-analysis of three randomized controlled trials of patients with osteoarthritis included 287 patients with a median treatment period of 3 months. This meta-analysis showed that treatment with proprietary rosehip powder consistently reduced pain scores and that patients were twice as likely to respond to rosehips (as indicated by a decrease in WOMAC pain) compared to placebo (effect size 0.37, 95% CI: 0.13 - 0.60). Thus, the authors concluded that rosehip powder does indeed reduce pain and that its efficacy and safety need to be evaluated and independently replicated in future large-scale long-term studies.

A later meta-analysis provides an indirect comparison of the analgesic effect of glucosamine hydrochloride and standardized rosehip powder in osteoarthritis. This

analysis, based on three studies of glucosamine hydrochloride with a total of 933 patients and the three studies described above with 287 patients, concluded that rose hips were more effective than glucosamine hydrochloride in reducing pain in patients with osteoarthritis.

Clinical trials of rose hips are not only the subject of meta-analyzes, but are also systematically analyzed. One systematic review of two relatively small (n = 100 and 112) double-blind, randomized, placebo-controlled trials, both of which were considered high quality with a Jadad score of 5 out of 5, concluded that rosehip powder had a moderate effect. in patients with osteoarthritis. The same conclusion was reached in another systematic review that included four trials (two of which were identified as subgroup analyzes).

A growing database of rose hips indicates that this traditional herbal remedy has a high safety profile. Although further research is needed to establish its clinical role, existing studies (both in vitro and in vivo) indicate that standardized rosehip powder can offer an effective first-line therapy and is a viable replacement or adjunct to conventional drugs such as NSAIDs for osteoarthritis. and possibly other inflammatory diseases.

REFERENCES:

1) Rein E, Kharazmi A, Winther K. A herbal remedy, Hyben Vital (stand. powder of a subspecies of Rosa canina fruits), reduces pain and improves general wellbeing in patients with osteoarthritis: a double-blind, placebo-controlled, randomised trial. Phytomedicine 2004;11:383–91.
2) Böhm V, K, Fröhlich K, Bitsch R. Rosehip: a "new" source of lycopene? Mol Aspects Med 2003;24:385–9.
3) Machmudah S, Kondo M, Sasaki M, et al. Process optimization and extraction rate analysis of carotenoids extraction from rosehip fruit using supercritical CO2. J Supercrit Fluids 2008;44:308– 14.