Elderberry and raspberry for influenza

Sixty Norwegian patients (aged 18-54 years) suffering from influenza-like symptoms for 48 hours or less were randomly assigned to receive, in double-blind fashion, 15 ml of a syrup containing extracts of black elderberries and red raspberries (Sambucol®) or placebo four times per day during meals for five days. Symptoms were recorded daily using a visual analogue scale. The mean time until complete or almost-complete symptom relief occurred was 3.1 days in the group receiving Sambucol and 7.1 days in the placebo group (56.3% reduction in symptom duration; p < 0.001). No side effects were reported.

Comment: Sambucol is a commercially available preparation that has been shown to inhibit the replication of various strains of influenza virus in vitro. The results of the present study confirm earlier preliminary research indicating that this preparation can decrease the duration of symptoms in people with influenza. Considering its apparent lack of toxicity and moderate cost, Sambucol should be considered for first-line treatment of influenza. It would be interesting to determine whether elderberry/raspberry extracts are also active against avian influenza viruses (bird flu).


Cold-cocking a cold with intravenous nutrients

A 40-year-old male came to my office with a cold and a one-day history of fatigue, nasal congestion, and runny nose. He was given an intravenous infusion containing 3.5 g of vitamin C, 600 mg of magnesium chloride hexahydrate, 1.5 ml of 10% calcium gluconate, 1,000 mcg of vitamin B12, 100 mg of vitamin B6, 250 mg of dexpanthenol (a form of pantothenic acid), and 1 ml of “B complex 100” (which provided 100 mg each of thiamine and niacinamide and smaller amounts of other B vitamins). By the end of the ten-minute infusion, he was symptom-free and full of energy. The symptoms did not return until the next day, at which time they were only about ten percent as severe as before the injection.

Comment: I have administered various modifications of the above injection (typically referred to as the Myers cocktail) to about 100 patients with acute upper respiratory tract infections (URIs). Approximately 15%-20% of the patients had the same immediate and dramatic results experienced by the patient described here. Another one-third felt considerably better by the next day, whereas about half of the patients did not appear to benefit from the treatment.

There is no obvious way to predict who will benefit from the Myers cocktail the first time they receive it. However, most patients have had a similar response to subsequent treatments as they did from the first one. Therefore, if a patient’s upper respiratory infection (URI) does not improve significantly from this injection, there is little reason to repeat it the next time he or she develops a URI.

While high-dose oral vitamin C may reduce the average duration of a cold by about 30%, it is not possible to obtain the rapid results with oral dosing that one can achieve with intravenous administration. Apparently, the high serum nutrient concentrations that occur with intravenous injections result in unique biochemical effects. My experiences administering 15,000 intravenous nutrient injections over a 17-year period are summarized in the article cited below.


Grapefruit for periodontal disease

Fifty-eight patients (mean age, 45 years) with chronic periodontitis were assigned (apparently without randomization) to consume two grapefruits per day for two weeks (n = 38) or to serve as a control group (n = 20). Prior to treatment, the mean plasma vitamin C concentration was significantly lower in these patients than in healthy controls. The sulcus bleeding index improved significantly (p < 0.001) in the group eating grapefruit, but did not change in the control group.

Comment: These results suggest that regularly eating grapefruit can reduce gingival bleeding in patients with chronic periodontitis. This improvement may be due in part to the vitamin C content of grapefruit. However, studies using vitamin C alone to treat periodontal disease have produced conflicting results. Grapefruit also contains a number of different flavonoids, and previous research has shown that the combination
of vitamin C and flavonoids is more effective than vitamin C alone in the treatment of periodontal disease. Grapefruit also contains an array of other nutrients and phytochemicals, some of which might enhance gingival health.

Grapefruit interacts with certain calcium-channel blockers, lovastatin, cyclosporine, saquinavir, and other drugs that are metabolized by the cytochrome P450 enzyme CYP3A4. Most of these interactions with grapefruit can increase the toxicity of the medication. It is important, therefore, to question patients about medication use before recommending grapefruit therapy.


Essential fatty acids for atopic dermatitis

Sixteen patients (mean age, 38.1 years) with atopic dermatitis were randomly assigned to receive, in single-blind fashion, 30 ml/day of hempseed oil or placebo (olive oil) for eight weeks. After a four-week washout period, each patient received the alternate treatment for an additional eight weeks. Improvements were seen in the hempseed oil group in skin dryness (p < 0.03 compared with baseline, p = 0.064 compared with placebo), itchiness (p < 0.03 compared with baseline, p = 0.087 compared with placebo), and use of topical medication (p < 0.03 compared with baseline, p = 0.118 compared with placebo).

Comment: Hempseed oil has been used as a food and medicine in China for at least 3,000 years. It contains 54% linoleic acid, 22% alpha-linolenic acid, and four percent gamma-linolenic acid. The results of the present study indicate that hempseed oil may be beneficial in the treatment of atopic dermatitis. While improvements were statistically significant compared with baseline, they were only of borderline statistical significance when compared with the changes in the placebo group, probably because the number of patients in the trial was small.

Many studies have investigated the effects of various edible oils in the treatment of atopic dermatitis. Sunflower oil has been beneficial in a few studies, evening primrose oil has been helpful in some studies and ineffective in others, and borage oil has not been efficacious. This pattern of responses suggests that linoleic acid (an omega-6 fatty acid present in high amounts in sunflower and evening primrose oil, and in smaller amounts in borage oil) is active against atopic dermatitis, whereas gamma-linolenic acid (an omega-6 fatty acid present in large amounts in borage oil and in smaller amounts in evening primrose oil) is less important. That suggestion runs counter to a popularly held theory that gamma-linolenic acid is the key compound, because people with atopic dermatitis have a defect in the conversion of linoleic acid to gamma-linolenic acid.

Some studies suggest that fish oil (a source of long-chain omega-3 fatty acids) is also beneficial, and anecdotal reports indicate that flaxseed oil (a major source of another omega-3 fatty acid, alpha-linolenic acid) is effective as well. We still have a lot to learn about which essential fatty acids are most useful for people with atopic dermatitis. It is likely that different fatty acids are preferable for different people, because of individual differences in fatty acid metabolism.

While additional clinical trials of essential fatty acids would probably lead to more effective treatments for atopic dermatitis, the American Academy of Dermatology has squelched interest in this topic by publishing a biased, non-scholarly “Practice Guidelines” paper, which stated that essential fatty acids are of no value for patients with atopic dermatitis (see this month’s editorial, page 124).


Probiotics increase *Helicobacter pylori* eradication rate

One hundred thirty-eight patients with *Helicobacter pylori* infections that had been resistant to conventional triple therapy were randomly assigned to receive quadruple therapy alone (amoxicillin, metronidazole, omeprazole, and bismuth) for one week or quadruple therapy plus pretreatment with a lactobacillus- and *bifidobacterium*-containing yogurt (AB-yogurt). The yogurt was administered at a dose of 200 ml twice a day for four weeks prior to the start of quadruple therapy. The *H. pylori* eradication rate (evaluated at least six weeks after quadruple therapy) was higher in the yogurt group than in the quadruple therapy-only group (intent-to-treat analysis, 85% vs. 71.1%; p < 0.05; per-protocol analysis, 90.8% vs. 76.6%; p < 0.05).

Comment: Previous studies have shown that concurrent administration of probiotics can enhance the efficacy of triple therapy, in part by reducing the adverse effects of the antibiotic regimen and increasing compliance with the treatment. In the present study, the increase in eradication rate cannot be explained by greater compliance with quadruple therapy, because probiotic supplementation also increased the eradication rate in the intent-to-treat analysis, which includes patients who did not complete quadruple therapy. Pretreatment with AB yogurt probably worked by decreasing the *H. pylori* load, thereby improving the efficacy of subsequent quadruple therapy.
