Pinning down the cause of nail problems is the first step to prevention, finding solution

Chicago (August 5, 2010) – For many people, the phrase “tough as nails” doesn’t apply to their own nails. Instead of strong nails, their nails may be brittle and break or split easily. Or, nail fungus might cause nails to look unattractive and unhealthy. Fortunately, dermatologists can help people improve the health and overall appearance of their nails with proper diagnosis and treatment.

At the American Academy of Dermatology’s Summer Academy Meeting 2010 in Chicago, dermatologist Phoebe Rich, MD, FAAD, adjunct professor of dermatology at the Oregon Health & Science University in Portland, discussed the most common nail ailments and how to prevent and treat them.

Brittle Nails Require Handling with Care

Brittle nails affect millions of people and are characterized by peeling, splitting, fracturing and chipping, often causing aesthetic and functional problems. While no segment of the population is spared, brittle nails are more commonly seen in women, and the incidence increases with advancing age in both women and men. People who work in certain occupations with exposure to irritating substances and water also are more at risk for brittle nails.

Dr. Rich explained that brittle nails are caused by both internal and external factors. Internal factors that contribute to brittle nails include genetics, aging, or other nail problems such as nail psoriasis and nail fungus. On rare occasion, certain internal disorders such as thyroid abnormalities, anemia, or the effects of chemotherapy may be responsible for brittle nails. However, external factors – including exposure to harsh irritants, such as chemicals and solvents and even excessive water exposure – are far more likely to cause brittle nails.

“Brittle nails can sometimes be painful to the point of making it difficult to do simple activities like buttoning a shirt,” said Dr. Rich. “The nail plate itself is not living, which is why we can cut and file our nails without discomfort. But if a nail split or chip goes into the live nail bed tissue to which the nail plate attaches, it can be painful until the nail plate grows out and covers the exposed nail bed.”

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While treatment of brittle nails can be challenging in some cases, Dr. Rich explained that a three-pronged approach is always recommended. The first step is to rule out any underlying medical conditions or correct those that are contributing to the problem. The second step is to protect the nails from environmental exposure in daily activities in order to prevent conditions that can cause brittle nails. For example, a good line of defense is wearing gloves to do chores that expose the nails to harsh chemicals, limiting exposure to water and avoiding excessive hand washing.

“Using mild soaps to wash hands, washing primarily the palm side of the hands, drying hands well after washing and avoiding waterless hand sanitizers that contain a high alcohol content will help control brittle nails in most cases,” said Dr. Rich.

The third step is to treat the nails by several methods known to strengthen the nails. The correct water content in the nail must be maintained to keep nail cells properly hydrated and flexible. Dr. Rich recommends “greasy” products, such as plain petroleum jelly to provide a protective barrier over the nail. High water content moisturizers that shake or pour should be avoided, as the water actually evaporates and leaves little protection behind. In general, thick hand creams found in a tube or jar are more effective than watery ones.

“Hand lotions that contain humectants, such as urea, which attract and hold water in the nail can be helpful in keeping the nail flexible and less likely to fracture,” said Dr. Rich. “A dermatologist can help patients find the best therapeutic moisturizers to keep brittle nails adequately hydrated.”

While foods rich in calcium help strengthen bones, they do not help strengthen nails, but adequate protein in a well-balanced diet is helpful in improving nail health. However, Dr. Rich cautioned that the old data on protein-rich gelatin as the magic bullet for weak nails is not scientifically significant.

Similarly, the known health benefits of vitamins do not always translate into improving nail health. For example, Dr. Rich added that too much vitamin A may actually make nails brittle and fragile and should best be avoided. But there also is some suggestion that the B vitamin biotin at doses of 2.5 mg per day may improve brittle nails in some cases, but it may take four to six months to notice an improvement.

**Nail Fungus Could be Here to Stay without Proper Medication**

The prevalence of fungal infections, known as onychomycosis, is high and reported to be as high as 30 percent in the senior population. Since the infection occurs under the nail plate in the nail bed, it can be difficult to treat. Dr. Rich explained that the
same fungus that causes athlete’s foot and ringworm is responsible for nail fungus as well, which is why people with nail fungus are susceptible to athlete’s foot and should try not to walk barefoot in public places. They also should wear water sandals or flip flops if they must use public showers.

While topical antifungal medications are readily available to treat nail fungus, Dr. Rich said that most of these over-the-counter formulas don’t work very well because these products are only applied on the surface of the nail and do not penetrate deep within the nail bed under the nail plate – where the fungus lives. Dr. Rich added that systemic medications can work well in clearing nail fungus and target the affected nail bed by way of the bloodstream.

“How fast the nail grows will determine how quickly the nail fungus will clear, but in most cases this can take up to a year,” said Dr. Rich. “The nail has to grow healthy from the base up in order for the fungus to clear completely.”

In addition, several new systemic medications and topical preparations currently being studied in clinical trials hold promise as future treatments. “There is a lot of exciting research being conducted in treating nail fungus, including creative vehicles to deliver antifungal medication to the nail such as patches, lacquers, and gels,” said Dr. Rich.

It is important to remember that nail fungus most likely will not subside on its own without some type of prescription treatment. While there is no harm in trying over-the-counter treatments or home remedies, patients should see a dermatologist if the condition does not improve or worsens.

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