Cyclosporine helps Stevens-Johnson syndrome and toxic epidermal necrolysis

Last Updated: 2010-06-18 15:33:30 -0400 (Reuters Health)

By Victoria Stern

NEW YORK (Reuters Health) - Treating mild cases of Stevens-Johnson syndrome and toxic epidermal necrolysis with cyclosporine appears to help reduce the progression of skin detachment and the rate of death, a new phase II trial suggests.

But the study was not powered to detect significant benefits of cyclosporine, lead investigator Dr. Laurence Valeyrie-Allanore, from Henri Mondor Hospital in France, told Reuters Health by e-mail.

Stevens-Johnson syndrome (SJS) and toxic epidermal necrolysis (TEN) are two forms of the same life-threatening skin disease characterized by rash, peeling skin, and sores on the mucous membranes. SJS and TEN, which are usually caused by drugs or a bacterial infection, affect an estimated 1 to 2 million people each year and kill about 22% of those affected.

"However, the pathophysiology of SJS/TEN is until now not well understood," said Dr. Valeyrie-Allanore. "And no treatment has clearly proven to stop progression of skin detachment and prevent mortality." Treating SJS and TEN with cyclosporine had shown some promise, but only in a few individual cases and one case series.

The current study, published online May 25th in the British Journal of Dermatology, evaluated the potential risks and benefits of using cyclosporine to treat 29 patients diagnosed with mild SJS or TEN.

Patients (mean age, 34.2 years) were admitted to the dermatology intensive care unit at Henri Mondor Hospital where they received cyclosporine solution orally at an initial dose of 1.5 mg/kg b.i.d. for 10 days, followed by 1mg/kg b.i.d. for another 10 days, and finally 0.5 mg/kg b.i.d. for ten days.

Although the prognostic SJS and TEN score (SCORTEN) predicted 2.75 deaths, no patients died in the trial (p=0.1). Mean epidermal detachment remained stable in 18 of 29 cases (62%), and the mean hospital stay was 16.2 days.

Overall, the treatment was well tolerated. Cyclosporine was stopped early in three patients due to side effects, and it was tapered earlier than scheduled in two cases for alteration in renal function.

Dr. Valeyrie-Allanore's team believes that taking cyclosporine may have contributed to the survival of all the patients. However, the researchers don't know whether these mild cases would have progressed at all if left untreated, and thus their results do not provide clear evidence that cyclosporine is an effective treatment.

Novartis France provided the study drug for free and participated in initial discussions on study design.

http://www3.interscience.wiley.com/journal/123473901/abstract

Br J Dermatol 2010.