Latest Advances in High-Energy Dye Laser Platform Provide Unsurpassed Treatments



Paolo Bonan, M.D. Laser Researcher and Professor of Dermatology University of Florence, Italy



Before treatment



After Synchro VASQ treatment Photos courtesy of Prof. G. Cannarozzo, Prof. P. Campolmi and Prof. P. Bonan, M.D.



Before treatment



Two years after one Synchro VASQ treatment Photos courtesy of Prof. G. Cannarozzo, Prof. P. Campolmi and Prof. P. Bonan, M.D.

By Ilya Petrou, M.D., Contributing Editor

Synchro VASQ, designed by DEKA (Calenzano, Florence, Italy) is the ultimate vascular platform system, achieving levels of technical innovation reportedly never attained before for vascular lesions and malformations. With a new, selective pulsed dye laser platform featuring a 595 nm wavelength – an energy that is well absorbed by oxyhemoglobin -Synchro VASQ effectively treats vascular anomalies such as telangiectatic rosacea and superficial erythrosis. Typically these indications cannot be treated with this wavelength, but RightLight[™] technology (selective pulsed dye lamp handpiece) has made this possible.

"I have been using Synchro VASQ for indications such as severe port-wine stains and superficial erythrosis. In my experience, this is the very first time a dye laser can achieve this significant result with such a high degree of pain tolerance from patients," said Paolo Bonan, M.D., professor of Dermatology at the University of Florence, Italy, and Laser Researcher.

Synchro VASQ is safe and efficacious as a stand-alone or complementary treatment for various dermatological disorders in which alteration of skin micro-vessels may play a role. It has also recently been proposed for the treatment of psoriasis due to its capacity to reduce T-cell and immunocytokine counts normally implicated in the pathogenesis of psoriasis.

Psoriasis is a disease normally characterized by elongation and tortuosity of the dermal capillary loops and an increase in capillary volume. Dermal angiogenesis is directly related to epidermal hyperplasia, producing a chronic inflammatory condition in which an immunopathogenetic alteration and cytokine deregulation are present.

Synchro VASQ has proven effective in treating resistant plaque type psoriasis that is unresponsive to conventional treatment and localized in small areas. One of the great advantages of this device is that it is an alternative to disease control. Recently, efficacy in the treatment of nail psoriasis has been documented.

"This new application of Synchro VASQ was a discovery for us," reported A. Bassi, M.D., and M. Troiano, M.D., Prof. Bonan's assistants at the University of Florence. "It acts on dermal capillaries and allows the reduction of T-cell and immunocytokine counts. In addition, it normalizes epidermal cell proliferation and clinically improves skin lesions."

Owing to the new high-energy laser emission pulse, Synchro VASQ provides great benefits on hypertrophic scars, specifically treatment of the vascular component of the scar. DEKA's unique and exclusive dye pulse technology can offer a wider-range of spot sizes, fluences, pulse durations and peak powers to solve problems connected to severe scarring and border line applications for various scar types, ages and conditions, without producing significant pigmentary and textural complications.

According to Dr. Bonan, Synchro VASQ has proven to be extremely flexible and safe in his daily practice. "Having this light, incredibly versatile and easy to use device helped me to expand my own business," he stated.