

DR. MARCO PIGNATTI



Dermobiotica: the skin-gut axis

Many skin diseases are chronic and without a definite cure. For some of them cause is largely unknown and this makes treatments difficult. This leads to the use of antibiotics or immunosuppressive drugs associated with severe side effects.

Many of these diseases (eg. psoriasis, eczema, contact dermatitis, urticaria and food allergies, acne, rosacea and seborrheic dermatitis) seem to have links with . In particular psoriasis is strongly associated with a number of co-morbidities (including inflammatory bowel diseases such as Crohn's disease, hyperglycemia, insulin resistance and diabetes, hyperuricemia, hypercholesterolemia, weight gain and increased body mass, obesity, metabolic syndrome, nonalcoholic fatty liver disease, and celiac disease) that clearly relate to the gut and diet. Patients themselves perceive and report a link between diet and their pathology but often their comments and requests are not taken into account by the dermatologists.

Many of these conditions are the same for which we have highlighted a psychosomatic component that is a strong link between mental stress and the onset, recurrence or exacerbation of skin symptoms. Also this aspect is often reported by patients and equally neglected by dermatologists at the time of the therapeutic choice.

Recent studies on the intestinal microbiota have shown a strong link between intestinal inflammation, dysbiosis (altered qualitative and / or quantitative composition intestinal bacteria) and neuro-psychological well-being and between dysbiosis and skin diseases. In both, neurological and dermatological patients, disorders of the intestinal microbiota are characterized by low microbial diversity similar to those of patients with inflammatory bowel disease.

In many cases treatment of intestinal inflammation, diet and administration of certain probiotic strains have led to reduced systemic inflammation and, subsequently, to the improvement of neurological and dermatological symptoms.

In the light of these observations, it is necessary to include gut in the psychosomatic and psychoneuroendocrinology studies within the PNEI networks and the brain-skin axis. It is known that gut is the richest organ in neurons and produces most of serotonin circulating in the body. At this point, we are probably ready to go back to a theory developed over 80 years ago (and then abandoned) by two dermatologists, John H. Stokes and Donald M. Pillsbury, who first hypothesized that the connection between mind, brain, stress and skin pass through the gut: the brain-gut-skin unifying theory. Stokes and Pillsbury in a 1930 paper, hypothesized that emotional states could alter the normal gut microflora, altering intestinal permeability and contribute to systemic inflammation, and among the possible remedies they proposed cultures of *Lactobacillus acidophilus*!

I graduated in Medicine with 110 cum laude in 1995 from the University of Modena with a thesis entitled: "Analysis of a computerized system for the multidimensional assessment of people with Down Syndrome" supervisor Prof. Claudio Franceschi.

Specializing in Dermatology and Venereology in 2000 at the University of Modena.

CURRICULUM VITAE DR. MARCO PIGNATTI

I worked in the Prof. Carlo Pincelli's laboratory of cutaneous biology, dealing with: biology of keratinocytes with particular reference to the neurotrophins network and their receptors, apoptosis in the skin, skin stem cells, the effects of ultraviolet radiation on the skin, psoriasis and tumors skin, skin Neurobiology and neurocosmetology.

I worked on the project: "THE ROLE OF SURVIVIN IN SKIN STEM CELLS" of the research group of Prof. Carlo Pincelli University of Modena and Reggio Emilia.

I worked on the project: "Molecular mechanisms underlying melanoma" of the research group of Prof. Carlo Pincelli University of Modena and Reggio Emilia.

Currently work as a dermatologist in the provinces of Modena, Reggio Emilia and Rimini. Treat skin and skin blemishes diseases using modern methods, in the foreground laser therapy, using various types of laser devices, each with a specific function, and able to perform specific treatments and to take action on certain diseases or blemishes.

In recent years I developed a passion about the study of the relationships that links skin and its pathology with gut and its microbiota. I started to treat my dermatological patients starting from the health of their gut and I started to write a column on a local newspaper, on www.dermobiotica.it site and in several conferences around Italy.