

Vitiligo linked with Vitamin D

SYDNEY COSMETIC SURGEON **DR JOSEPH GEORGHY** BELIEVES HE HAS UNTANGLED THE MYSTERY OF WHAT CAUSES VITILIGO AND HAS PIONEERED A NEW MEDICAL TREATMENT FOR THE SKIN CONDITION. AIMÉE SURTENICH REPORTS.

Vitiligo is a skin disorder that causes depigmentation from areas of the skin, resulting in white spots or patches. It occurs when melanocytes, the cells responsible for skin pigmentation, are 'poisoned' and die or are unable to function properly and produce melanin.

Despite research, the cause of vitiligo is considered unknown. Dr Georghy believes that he's got the answer: Vitamin D deficiency may be one, if not the main, cause of vitiligo. He has carried out numerous blood tests on his patients who suffer from vitiligo and has found that virtually all of them had Vitamin D deficiency.

Dr Georghy proposes that the severity of the disease is directly related to the severity of the Vitamin D deficiency. 'Genetic predisposition and stress may be aggravating factors,' he says. 'However, from my research, children developing vitiligo early in their life have one or both parents who are Vitamin D deficient.' He believes that children who develop vitiligo at a very young age are also Vitamin D deficient or they may have inherited 'defective' DNA from their parents. He attributes these findings to intrauterine Vitamin D deficiency, lack of sun exposure during developing years and nutritional deficiency or combination of both.

'Vitamin D is essential for normal melanocyte function,' Dr Georghy explains, 'so a deficiency may cause abnormal DNA methylation and genetic alteration, resulting not only in vitiligo but in numerous skin conditions.'

New combined treatment for vitiligo

'I use PhotoDynamic HelioTherm combined with MicroPen micro-needling and platelet-rich plasma treatment,' says Dr Georghy. 'This triggers a cascade of bio-stimulating processes that ultimately results in skin repigmentation. Patients are also treated with high doses of Vitamin D, CoQ-10 or other supplements they may be deficient in.'

Platelet-rich plasma (PRP). This plasma is a naturally occurring component extracted from your own blood. The concentrated platelets found in PRP have huge amounts of growth factors, bioactive and signalling proteins, which are released when PRP is injected into tissue.

MicroPen micro-needling. 'I believe the MicroPen has revolutionised the practice of treating skin conditions,' says Dr Georghy. 'It is a slim, cordless, light and ergonomic design which fits in the palm of your hand. During the procedure, tiny needles are used to create controlled micro-injuries to the skin in order to produce collagen and elastin. In my experience, it is much faster than any other device on the market, allowing a more comfortable treatment for my patients.'

PhotoDynamic HelioTherm. PhotoDynamic Therapy (PDT) is a treatment that uses a substance called a HelioTherm photosensitiser. It helps the light and the heat to be absorbed and accumulated in the skin and underlying tissues, resulting in better skin contraction and collagen formation. 'I use a sensitiser I specifically developed, which is applied topically. PDT does not cause photosensitivity and overall has a good safety profile,' says Dr Georghy.

'HelioTherm employs light and heat energy delivered simultaneously to the treated areas. It is the only device on the market that results in deep and homogenous heat penetration to the underlying skin structures: fat, muscles, ligaments,' he continues. Dr Georghy believes that HelioTherm in combination with Vitamin D therapy, bio-stimulates the 'dormant' melanocytic stem cells (stimulates your own stem cells), corrects the faulty DNA by improving DNA methylation and eliminates 'oxidative stress'.

The biological effects of HelioTherm have been published in the textbook of *The American Academy of Anti-Aging Medicine, Anti-Aging Therapeutics*, Vol IX. 'The biological effects of this unique treatment are countless. The sky is the limit,' he says.

Dr Georghy says this combined treatment kickstarts a cavalcade of biological effects: immediate anti-inflammatory effects, formation of new blood vessels, improvement of oxygen supply and metabolic turnover at a cellular level, resulting in stimulation or re-activation of your own dormant stem cells to produce new, active and functional melanocytes.

'Skin texture starts improving within several days. Repigmentation will begin within few months, with best results seen after 12 to 18 months,' he concludes. **csbm**



1 BEFORE (this lady in her mid-50s had suffered from vitiligo since a teenager, particularly on her upper torso and face, as well as rosacea)



AFTER combination therapy by Dr Georghy, including IPL (PhotoTherm) and Photodynamic HelioTherm



2 BEFORE



AFTER combination therapy by Dr Georghy, including IPL (PhotoTherm) and Photodynamic HelioTherm



3 BEFORE (this teenager developed vitiligo, which started as a small dot on his chin and then spread over his face. He was also diagnosed with Vitamin D deficiency)



AFTER combination therapy by Dr Georghy, including IPL (PhotoTherm) and Photodynamic HelioTherm



4 BEFORE



AFTER combination therapy by Dr Georghy, including IPL (PhotoTherm) and Photodynamic HelioTherm



5 BEFORE (vitiligo started as a small dot on his scrotum and then spread across his body to around his eyes, forehead and mid-face. He was also Vitamin D deficient)



AFTER combination therapy by Dr Georghy, including IPL (PhotoTherm) and Photodynamic HelioTherm