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Facial skin ageing : a new treatment option through Endermolift process

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Skin mechanical characteristics are closely related to those of the dermis. Indeed, by its compressibility and extensibility, this layer absorbs shocks and gives to the skin its essential properties of elasticity, spontaneous tension and firmness. Cutaneous tissue is subjected to both internal and external forces.

Mechanical forces have an impact on fibroblasts through the mechanotransduction which is the conversion of mechanical signals into biochemical response. This response is characterized by the modulation of genes expression coding for extracellular matrix components (Type I, III, V,.. collagens, elastin...) but also for degradation enzymes (MMP) and their inhibitors (TIMP).

Endermolift is a non invasive and safe technique of mechanical stimulation delivered by flaps micro-beats at different frequencies. The stimulation produced by the treatment heads can induce mechanotransduction by sending a message to the dermal fibroblasts and triggering modification of their behavior within the extracellular matrix.

On this basis, we have evaluated the effects of Endermolift on 10 women volunteers treated on half side of the face. Beneficial effects of the treatment have been observed by the volunteers and by clinical quotation of the investigator. This biological approach through mechanotransduction is a novel promising therapeutic way for the treatment of facial skin ageing.