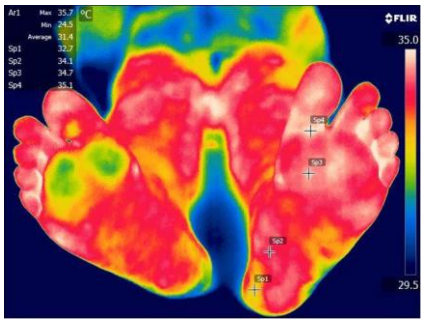
SkinDetector - Application of the innovative data fusion based non-invasive approach for management of the diabetes mellitus

Diabetes mellitus (DM) is a heterogeneous group of disorders characterised by a high serum glucose level and by disturbances of carbohydrate and lipid metabolism. Diabetics have a greater prevalence of skin manifestations in Type 2 than Type 1, and as the duration of the DM increased, the likelihood of developing skin manifestations also increased.



Early referral to a dermatologist may help to detect complications of the skin in diabetes at an early stage and may prevent disability caused by these complications.

Project objective

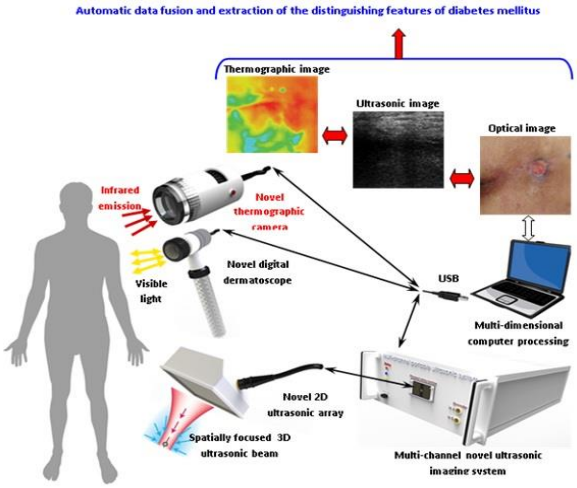
The aim of the project is to develop more accurate early-stage detection, diagnosis and monitoring that will reduce the microvascular and macrovascular complications of DM. The created system using appropriate information and communication technologies would provide more convenient intercommunication among physicians, by performing consultations, information and knowledge exchange. Therefore, the time between the right diagnosis and effective treatment will be minimised and the probability of negative consequences to the patient's health (limb amputations, or even death) will be avoided.

The novel smart diagnostic technique and portable equipment which will be developed in the project is intended to be used by general practitioners and local primary care clinics. Also, the low weight and mobile equipment will be suitable to be used for patient homecare as well.

Some of the key problems faced by patients with DM are the following:

- At least 30% of people with DM have some type of external including cutaneous involvement during the course of their chronic disease and diabetic foot is the main one.
- Over 15% of diabetic foot ulcers require amputation.

Although the end results of diabetic foot ulceration may be devastating, the development of ulceration is preventable, thus early diagnosis is crucial.



The capabilities of modern telemedicine will extend the possibilities for use outside of the project, especially in rural or underserved areas performing tele-consultations with tertiary level specialist physicians.

For further information, please visit the project website at **www.skindetector.eu**.

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