

## Thermography

Since Thermography is an extremely sensitive method for measuring point-specific differences in body temperature, it is importance to observe the following guidelines:

## **Medication intake**

• Take no medication, only very important ones (e.g. insulin).

## Important instructions on the day of your appointment

- Please bring the completed thermography medical history form (info leaflet:14021) with you.
- Please come to your appointment well rested and relaxed (no exercise or long walks on the morning of your appointment, take the shuttle bus).
- Shower but take no bath in the morning.
- Have a small breakfast, drink only one coffee and abstain from cool drinks like coke.
- Please apply no make-up, a thin layer of face/body lotion is allowed.
- To adjust to the room temperature, you have to sit in the room for a while before the procedure starts.
- Please wear underwear, long-sleeved shirts/sweatshirts and long trousers
- Wear a blouse or shirt with buttons on front, if possible.
- Do not smoke just before your appointment.
- Brushing your teeth is allowed.

The procedure will take approximately 1- 11/2 hours for the test and discussion.

## Some more information about Thermography

Thermography is an instrument that measures body temperature with graphically displayed results. Ancient time physicians already have observed body temperature changes at various parts of their patient's body indicating inflammatory processes and disease of organs or tissue under the skin.

Humans actively keep their internal body temperature as close to constant as possible, which helps to survive changes in seasons and climate zones. Our body temperature is generated by cellular metabolism, especially within the metabolically active organs of the liver and muscles. In order to maintain a relatively consistent internal body temperature, there is a constant balancing of heat production and heat emission.

Physiologically, heat production is the more important mechanism because being a metabolic necessity, it is very hard to supress. Thermoregulation takes place on the body periphery by vasodilation – the process of expanding or restricting the size of the blood vessels. Enlarged blood vessels will allow more blood to flow near the surface of the body and thus heat is released via radiation. Restricted blood vessels on the other hand will allow the body to cool down.

Detailed investigations revealed that there are different surface temperatures at different bodily locations. Every person has his own typical temperature pattern which hardly changes from day by day or week to week. It only changes during illness or recovery, or in cases of substantial change in living circumstances. The Thermography



diagnostic is based on this individual temperature pattern which can change dramatically by impulses given by internal organs.

What happens when the human body is exposed to a cooling influence? After 1-2 minutes already the skin starts its cooling process, reaching the new thermoregulated body temperature about 5-10 minutes later. For example being in a room without cloth, with an ambient temperature of 22° C, demands a slight thermoregulation adjustment to the new situation.

Thermal diagnosis of the body surface assumes that illnesses of internal organs and disturbances of their functions project as temperature patterns on the surface of the skin which are then diagnostically detectable. In the same way neural reflexes reach the skin zones which are affected by internal disturbances (so-called Head zones).

Thanks to modern technology of electronic thermal sensors, we are able to determine the temperature at different skin locations, very fast and with great accuracy. An attached computer evaluates the results and thus each deviation from the physiological standard value can be found and interpreted as an inflammatory or degenerative change in the associated neural segment.

Designated points are measured twice, before and after an initiated cooling process. In this way, the body is forced into thermoregulation; every body part reacting differently to this stimulation. According to the body's ability to thermo-regulate, important diagnostic references can be measured, such as the thermal reactivity of the organism as a whole, for separate parts of the body and if a normal, a decreased or increased reaction of a particular organ can be found?

According to this information, early signs of malfunction can be detected prior the patient experiences any symptoms of disease. Furthermore, connections between harmful influences (e.g. dental foci, sinus, tonsils, appendix etc.) and chronic condition can be determined. Most importantly thermography allows 1) early detection of disease 2) a way of evaluating a person's response to therapy and 3) offers a non-invasive, accurate way of total body assessment.