

## IUD investigation Viscero-cutaneous reflexes

In 1954 Bauman and Uckert mentioned that the spots of pain, measured by galvanic equipment, were usually colder than the rest of the skin. For that reason the skin temperature seemed to be of importance to investigate chronic pain.

Inserting IUDs seemed to be an ideal way to check whether sensation situations of the internal organs could be visible on the skin. In order to do so a very accurate measuring equipment was necessary. Inserting an IUD gives a slight sensation for a very short time. Only exceptionally a woman experiences a short fierce pain. A slight reaction on the skin could be expected. That appeared to be the case. The insertion procedure itself takes about 5 minutes and the temperature of the skin which functions as a monitor of the uterus increases less than 0.4 ° Celsius.

During a check after two weeks the temperature normally has not increased more than 0.2° Celsius compared to the average abdominal skin temperature. Already in 1980 there was measuring equipment that was capable of measuring such small changes. Those were large machines that could be moved by a tripod and were filled with liquid nitrogen. The camera weighed 40 kilos and could be adjusted to the right height above the patient. Usually a height of 75 cm to 1 meter. All big electronics manufactures produced them. Philips Medical Systems in Best put a thermograph available for these investigations.



During the period of time of this investigation 31 IUDs were inserted. It was found that in the skin area related to the uterus the temperature significantly increased. The conclusion then should be that viscerocutaneous reflexes are present with people. That means in case of an abdominal pain complaint which obviously has been located in the abdominal skin still closer investigation of the abdominal organs must take place. The application of simple technique dating from 1929 and adjusted

by Kloosterman are insufficient. In the mean time the existence of these reflexes has also been demonstrated by an investigation group in Denmark. The physiotherapists can (almost) be confident.

Reverse: the cutano-visceral reflex way has not yet been demonstrated with human beings.

It probably exists: pain observed in the own practice decreases by local anesthesia of the abdominal skin in case of appendicitis, gall bladder inflammation, gall stones and kidney stones actually points in that direction. Unfortunately the group in Denmark (Arent-Nielsen and others) wasted their chance.