

# A different method: Measurement of thermoregulatory response to heating blanket in a tetraplegic man

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## Introduction and aim

A standard thermoregulatory sweat test requires specialized equipment. It can be time-consuming and inconvenient for the patient. We measured thermoregulatory responses to heat in a tetraplegic man using heating blanket BARRIER EasyWarm®.

## Methods

BARRIER EasyWarm® is a self-warming blanket that when opened and unfolded heats to 44°C within 30 minutes and maintain a constant temperature for up to 10 hours.

A 38 years old male with a 12 years old traumatic SCI (C6 AIS A) had been anamnestic anhidrotic after the injury. He reported feeling unwell during sports and in hot environment.

## Conclusion

By using a low cost and "low-tech" heating blanket the test showed a **fall in SBP and HR during heating, highlighting the temperature regulation failure the patient experienced.**

## Results

Data was collected preheating, during heating and post heating respectively: Changes in systolic Blood Pressure (SBP) and Heart Rate (HR) were statistically significant.

Auricular temperature rose from 36,10°C to 36,9°C during heating and rose further after the blanket was removed to max 37,4°C 37 minutes after removal of the heating blanket.

Only minor sweat was registered on the forehead during testing. The patient felt unwell with nausea, dizziness and tight chest during the heating period and developed spasm at the end of heating. The symptoms continued for 30 min post heating.



BARRIER EasyWarm®

