triphenyl tetrazolium chloride staining showed no infarction. *P<0.05 uncontrolled vs. controlled, mean ± SEM.

**Conclusions** Our novel ischemic brain model provides an effective tool to study brain ischemia. More importantly, these data indicate that controlled reperfusion attenuates reperfusion injury in the brain as it has been applied in other organs, and introduces the potential of using controlled reperfusion as a new treatment for sudden death and stroke.

**Reference**

**P71**
Effectiveness of an underbody forced warm-air blanket in preventing postoperative hypothermia after coronary artery bypass graft surgery with normothermic cardiopulmonary bypass

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**Introduction**
Perioperative hypothermia in coronary artery bypass graft (CABG) is associated with adverse outcomes [1,2]. An underbody forced-air warming blanket was developed for use in cardiac surgery. The primary aim of this investigation was to study whether this blanket could prevent postoperative hypothermia in routine CABG.

**Methods**
Sixty low-risk patients who underwent elective CABG were assigned into an intervention group that received the full underbody forced warm-air system (n = 30) and a control group that received standard thermal care (n = 30). Routine heat-conservation methods were applied in both groups including draping of the patient, fluid warming and normothermic cardiopulmonary bypass (CPB) at core temperature ~36.5°C. The forced warm-air system was set at 43°C at the end of perfusion until departure from the operating room (OR). Bladder temperature was measured at: T1 – end of perfusion, T2 – departure from the OR, T3 – arrival in the ICU, T4 – 1 hour after arrival in the ICU, and T5 – 3 hours after arrival in the ICU.

**Results**
The number of patients arriving in the ICU with a bladder temperature ≥36°C was significantly higher in the intervention group than in the control group, respectively 27 patients (90%) vs. 14 patients (46.7%) (P < 0.001). Initial temperatures (mean ± SD) at T1 were similar in both groups: 36.7°C ± 0.3°C vs. 36.5°C ± 0.2°C, respectively (P = 0.091). At time points T2, T3 and T4, the core temperature was significantly lower in the control group as compared with the intervention group, T2: 36.0°C ± 0.3°C vs. 36.5°C ± 0.3°C, respectively (P < 0.001); T3: 35.9°C ± 0.4°C vs. 36.2°C ± 0.3°C (P < 0.001); and T4: 36.0°C ± 0.6°C vs. 36.4°C ± 0.5°C (P = 0.026). At T5, 3 hours after arrival in the ICU, both groups had similar bladder temperatures (37.3°C ± 0.6°C vs. 37.2°C ± 0.7°C; P = 0.568). The temperature drop from the end of CPB to arrival in the ICU was significantly less in the intervention group compared with the control group (0.4°C ± 0.3°C vs. 0.6°C ± 0.4°C; P = 0.027).

**Conclusions**
The present study shows that additional warmth management with a full underbody forced warm-air system, applied in the OR to patients undergoing normothermic CABG, prevents hypothermia with its deleterious effects in the early postoperative phase.

**References**

**P72**
Good outcome in noncoronary out-of-hospital cardiac arrest treated with mild induced hypothermia

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**Introduction**
Mild induced hypothermia (MIH) has become a standard of care in comatose survivors of out-of-hospital cardiac arrest (OHCA) [1,2]. Even though the initial randomised trails excluded victims with noncoronary causes of OHCA, MIH may still be useful to attenuate ischemic brain damage in this group of patients.

**Methods**
We retrospectively studied 172 coronary and 32 noncoronary OHCA survivors that were treated with MIH in our ICU from 2002 to 2008 with regard to cerebral performance category (CPC) at hospital discharge. Bad outcome was defined as severe disability (CPC3), vegetative state (CPC4) and death (CPC5).

**Results**
Bad outcome was significantly more frequent in patients with noncoronary cause of OHCA (chi-square P < 0.0001). The subgroups of noncoronary cardiac arrest differed substantially with regard to outcome. The outcome after coronary and noncoronary OHCA treated with MIH is displayed in Figure 1.

**Conclusions**
No randomised controlled clinical trial supports the use of MIH in noncoronary OHCA. Although noncoronary OHCA seems to influence outcome negatively, further studies are warranted to examine the potential benefit of MIH in this category of patients.

**References**

**Figure 1 (abstract P72)**
Outcome after coronary and non-coronary OHCA and MIH treatment

- Coronal OHCA (n=172)
- Non-coronary OHCA (n=32)
- Electrical injury (n=1)
- Pulmonary embolism (n=2)
- Hanging (n=4)
- Drowning (n=7)
- Respiratory (n=13)
- Cerebral (n=6)

Percent 0% 20% 40% 60% 80% 100%

- CPC1
- CPC2/4
- CPC5