

Comparison of two forced-air warming devices for the prevention of hypothermia during abdominal surgery in the Lloyd-Davies position.

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Background

Prevention of peri-operative hypothermia may be challenging especially in situations where positioning of the patient leaves minimal body surface area available for warming strategies.



This is the case for the Lloyd-Davies position.

Goal of the Study



Underbody mattress

Vs



Upperbody blanket

Materials & Methods

- Forty-four patients undergoing surgery in Lloyd-Davies position
- Combined general and epidural anesthesia were randomly allocated to 2 treatment arms:

GROUP A: Underbody forced air mattress
by Mistral®

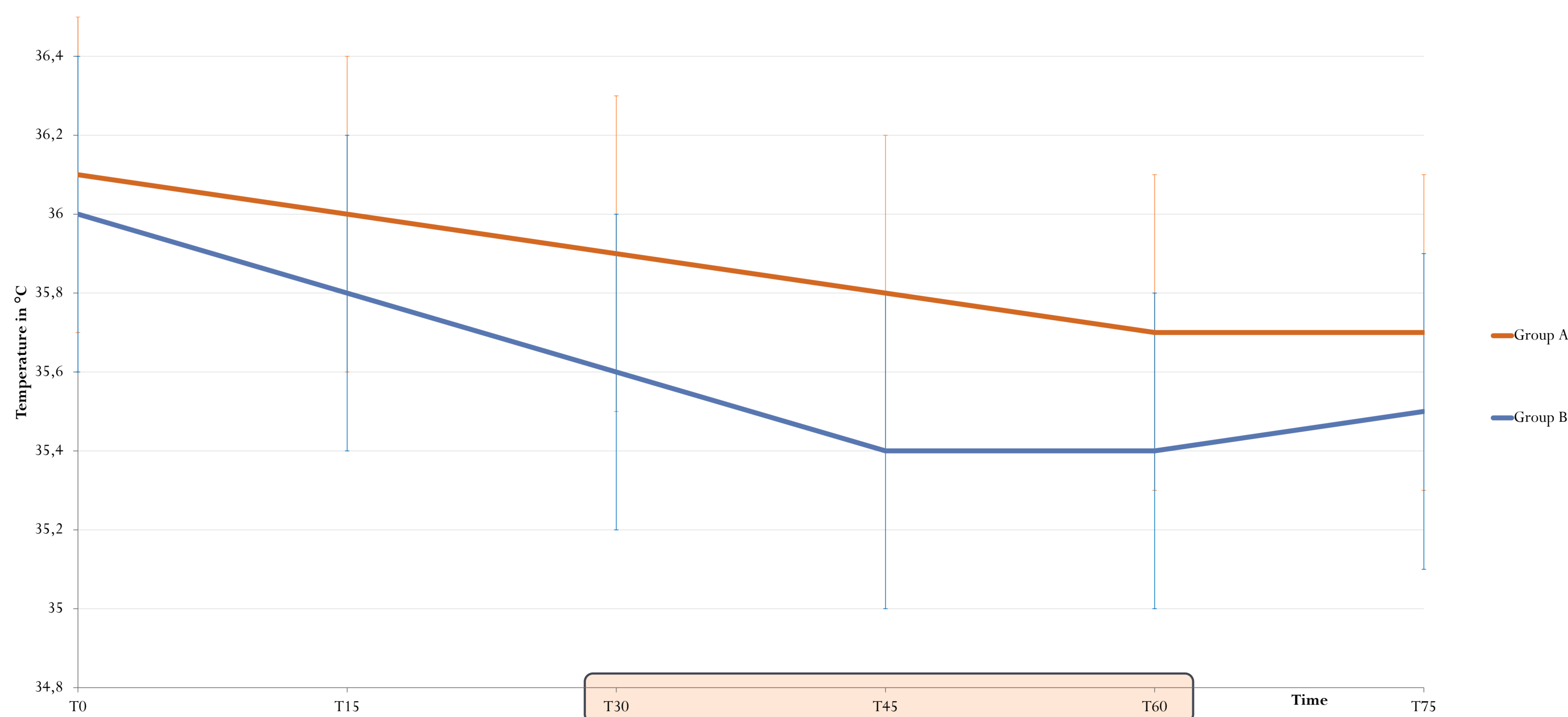
Vs

GROUP B: Upperbody forced air blanket
by Bair Hugger®

- From time of induction core temperature was monitored with an esophageal probe and recorded every 15 minutes.
- Temperatures over time in the different groups were analyzed using two-way analysis of variance for repeated measurements.
- Data are expressed as mean with standard deviation.

Results

- All patients were included in a period of 24 months.
- One patient was excluded because of malfunction of the thoracic epidural.
- Finally, data of 21 patients in group A and 23 patients in group B were used for analysis.
- There were no differences in patient characteristics between groups



Temperatures at T30, T45 and T60 were higher in group A than in group B ($P < 0.05$)

Discussion

- Early onset forced air underbody mattress may partially protect against post induction redistribution hypothermia.
- Patient installation requires some training and additional effort.
- Poor performance in obese patients and after installation of pillow for surgical exposure.

Conclusion

The forced-air warming underbody seems to provide better early temperature maintenance than the routinely used forced-air warming upperbody.