

Peri-operative Patient Warming: A Randomised Controlled Trial Comparing mediwrap Blanket And The Bair Huggers In Thoracic Surgical Procedures.

* S Rathinam; V Annam; * R S Steyen; G Raghuraman

Birmingham Heartlands Hospital, Birmingham, United Kingdom

Objectives: Perioperative hypothermia is associated with an increased morbidity. The current methods of maintaining normothermia are by actively warming them during the operation with Bair hugger and using passive heat retention blankets.

We studied the effectiveness of Mediwrap Blankets(M) and Bair Huggers (BH)in maintaining perioperative normothermia during a major thoracic surgical procedures.

Methods: We performed a prospective randomised control trial comparing the two modes of maintaining normothermia(M and BH)with the approval of COREC and R&D.

Thirty patients were recruited after obtaining informed consent and were randomised in to the two group M (n=16)and BH (n=14)between january 2005 to september 2006.

The care was standard in both groups except the choice of warming device and core and peripheral temperatures were monitored every 30 minutes up to 6 hours after the procedure.The variation in temperatures were analysed with a unpaired t test with a p value of 0.05 was accepted as significant using a Graphpad statistical software.

Results: There were 22 males(73%)with a median age of 68 years (range 47-83 yrs).There was no difference in the types of procedure or duration of procedure between the two groups (M:145.7 ± 13.42 min and BH:140.4 ± 16.79 min p:0.81). There was no difference in the core temperature at the end of the operation between the two groups(M:36.23 ± 0.16 and BH:36.01 ± 0.22 p:0.42). There was one mortality in the mediwrap group due to surgical haemorrhage.Two patients in each group needed Bairhugger restarted in recovery for hypothermia.The core temperature variations between the two groups is listed in table 1.

Conclusions: Mediwrap blankets are as effective as Bair Huggers in maintaining intra-operative normothermia in thoracic surgical procedures. Mediwrap blankets decreased the incidence and impact of transient postoperative hypothermia.

	Pre op	End of Surgery	2hrs	4hrs	6hrs	Time to normothermia
Mediwrap	36.75 ± 0.07	36.23 ± 0.16	36.79 ± 0.21	37.02 ± 0.16	37.15 ± 0.20	66.43 ± 17.84 min
Bair Hugger	36.76 ± 0.12	36.01 ± 0.23	35.71 ± 0.22	36.64 ± 0.14	36.89 ± 0.15	161.8 ± 28.92
p value	0.91	0.42	0.001	0.12	0.32	0.009

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