**1. THERMOSPOT – NON-INVASIVE HYPOTHERMIA INDICATOR. LITERATURE**

**2. A LIST OF KNOWLEDGEABLE DOCTORS (BEGINS ON PAGE 3)**

JDBZ *ThermoSpot "Quotes"2010-1, April 2010.*

Key Quotations from published Papers...

Morley D, Blumenthal I. A new neonatal hypothermia indicator. *Lancet 2000: 355: 659-660*

> *"Nurses and mothers like the device because it is simple and provides reassurance that the baby is warm enough."*

Kennedy N, Gondwe L, Morley D C. Temperature Monitoring with ThermoSpots in Malawi. *Lancet 2000: 355: 1364.*

> *"Poorly educated mothers quickly understood how the ThermoSpot worked and responded appropriately when warned of hypothermia. We commend its use."*

Morley D, Kennedy N. Hypothermia: prevention at community level. *Tropical Doctor 2002: 32: 22-24.*

> *"As there are so few studies in the frequency of hypothermia the ThermoSpot applied to all low-birth weight babies brought to health centres may start to make health workers aware of the problem of hypothermia."*

Chernishev A K. Some experiences in using the Skin Liquid Crystal Thermo Indicator on Newborn Children. A Russian Medical Journal. 2002. 241-242.

> *"These results confirm the high effectiveness of the LCSTT (Liquid Crystal Thermo indicator Test) at Se=98.08, Pw=0.98, Sp=66.67. These facts show a high importance of the technology of LCSTT for identifying hypothermia on newborn children in critical states in paediatric surgery.*
> *Our results confirm the results of research of N Kennedy, D Morley, I Blumenthal who point to the high effective control of hypothermia on newborn using the LCSTT".*

Morrice J S, Manda L S T,Kacheche A. Hypothermia and the use of ThermoSpots. *Tropical Doctor. (Letter to the Editor) 2003:33:253.*

> *"We agree with Morley and Kennedy that ThermoSpots are a useful tool in the monitoring of hypothermia and have demonstrated their effectiveness in older children with conditions likely to make them susceptible to hypothermia. Non-medical staff and guardians can be taught how to use them effectively. There was no difference in the reliability of the readings between placing the ThermoSpot in the supraclavicular fossa compared to the axilla. The supraclavicular position is more convenient as the ThermoSpot is less likely to fall off and can be used without undressing the child".*

Pejaver R K, Nisarga R, Gowda B. Temperature Monitoring in Newborns Using ThermoSpot. *Indian Journal of Pediatrics. 2004.71: 795-796.*

> *"We conclude that the ThermoSpot device is a simple accurate device allowing continuous thermal monitoring of low birth weight infants, especially in resource poor setting. Mothers quickly understood how the device worked and responded appropriately when warned of hypothermia".*

Green D A, Kumar A, Khanna R. Neonatal hypothermia detection by ThermoSpot in Indian urban slum dwellings, *Archives of Disease in Childhood – Fetal and Neonatal Edition 2006: 91: 96-98.*

> *"ThermoSpot is a cheap device. There were no adverse effects when it was applied over one week. It came unstuck on only four occasions. In this context, it is relevant that most cases of hypothermia occurred on the first day of life. This is agreement with Bang et al who found that 70% of episodes of hypothermia in perinates in rural Indian homes occurred on day 1. There is no other information in the medical literature on how the incidence of hypothermia is distributed during different days of the perinatal period.*
>
> *In this study the performance of ThermoSpot was satisfactory (sensitivity 88%) when used by non-medically trained local volunteers in the homes of an Indian urban slum"*

Mitchell A F M, MacFadyen. A new thermometer to prevent neonatal hypothermia.*Paediatrics and Child |Health. 2007: 17: 10: 410.*

> *"This device was principally developed for use in the developing world and has been proven to be valid and reliable in these settings, but there is no information available on its use in the UK.*
>
> *Conclusions: Our pilot study has confirmed the ThermoSpot is easy to apply, acceptable, felt to be reliable and relevant to care in a developed world setting. This study has highlighted the frequency of mild hypothermia for midwifery staff, aand its use will facilitate an audit of interventions to reduce the risks of hypothermia in the delivery suite and beyond. It is particularly appropriate as part of education for parents who are trying to follow advice on reducing the risk of cot death linked to overheating. Maintaining neutral-thermal neonatal environments is multifactorial, and the ThermoSpot may be able to play a role in the jigsaw of measures used."*

Kumar V *et al.* Effect of community-based behaviour change management on neonatal mortality in Shivgarh, Uttar Pradesh, India: a cluster-randomised controlled trial. *The Lancet. 2008: 372: 1151-1162.*

> *"The intervention that included the use of theThermoSpot did not seem to have an advantage over the package of essential newborn care. However, in other settings, and for a lower intensity intervention with fewer visits by trained community workers, the ThermoSpot might still offer an advantage for timely recognition, prevention and management of hypothermia.*

Unpublished Paper

Strestha M, Basnet S, Shrestha P S, Comparison of Liquid Crystal Device with Low Reading Axillary Thermometer in Detecting Neonatal Hypothermia.
(7 pages).

> *Conclusion: Liquid crystal device "ThermoSpot" had a sensitivity of 97.8% and Specificity of 99.8% in detecting moderate hypothermia. So it can be used with ease even for continuous monitoring of temperature.*

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