

Clinical Study of the SleepCurve[©] Mattress in the treatment of Positional Plagiocephaly (Flat Head Syndrome)

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This was an independent research study.
SleepCurve's only involvement was the
supply of the mattresses.

This study was undertaken over 6 months
in 2010 and the final study report was
published in the July edition of The Journal
of Craniofacial Surgery in July 2014

The study investigated the effects of using a SleepCurve mattress on 30 babies with Positional Plagiocephaly (Flat Head Syndrome)

All the babies had some degree of cranial asymmetry (mis-shapen head)

The babies heads were measured pre-study. They were all given a SleepCurve mattress to sleep on and measured again in six months.

Summary of Conclusions

Patients using SleepCurve[©] mattress showed an improvement in head asymmetry.

The average Cranial Vault Asymmetry fell from 16.5mm pre study to 5.5mm post study.

[The improvements were] Equivalent to results reported for helmets.

SleepCurve[©] Mattresses are a low cost treatment for deformational plagiocephaly (1/40th cost of a helmet)

Reduced pressure on baby's head

Pressure mapping showing the effect of the curve on a SleepCurve mattresses on the resting point on a baby's head

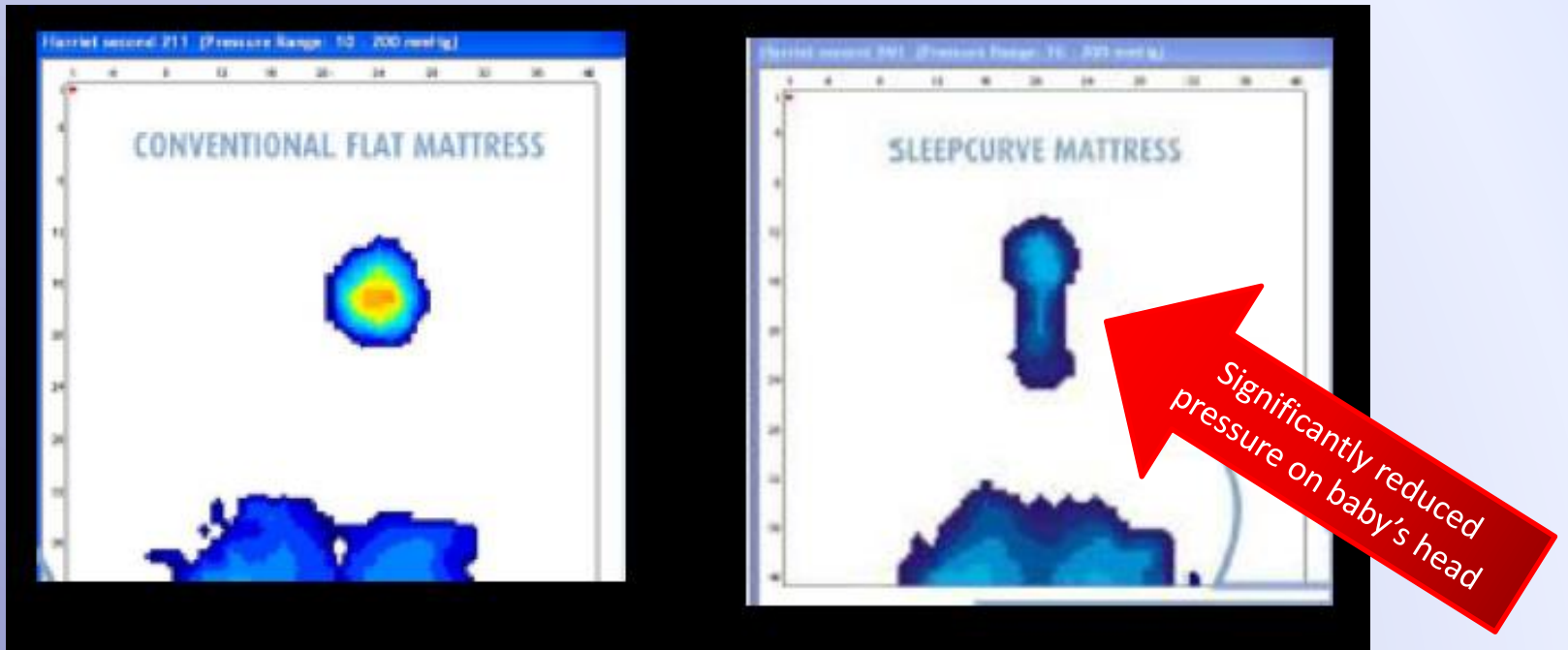


Image courtesy of Alder Hey Children's Hospital

The clinical study results

Severity of Cranial Vault Asymmetry	Number of patients pre study	Mean CVA before clinical study	Mean CVA after clinical study
Mod CVA 6-12mm CVA	8	9.5mm	2.75mm
Severe CVA >12mm CVA	19	20.5mm	6.85mm

Notes:

The average CVA fell from 16.5mm pre study to 5.5mm post study.

This is an average improvement in head shape of 11mm (a 68% correction) over 6 months.

Cranial Vault Asymmetry (CVA) measured using anthropometric cranial callipers.

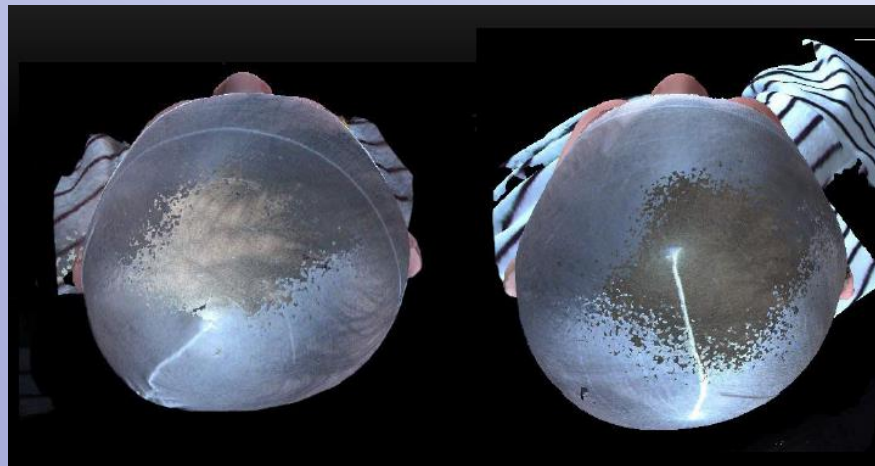
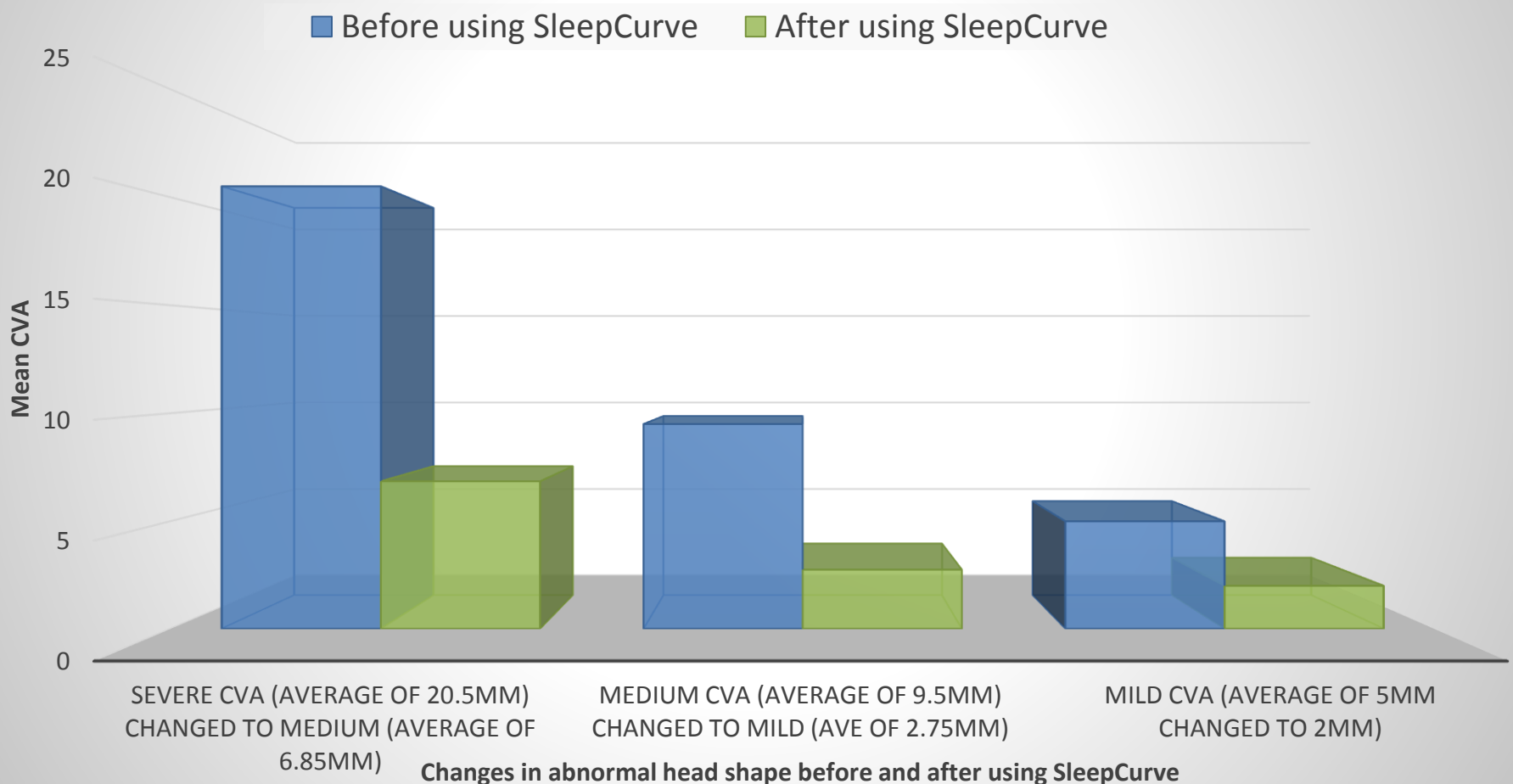


Image courtesy of Alder Hey Children's Hospital

The Results:

A significant improvement in head shape was found after using SleepCurve mattresses

Change in the mean Cranial Vault Asymmetry for severe and medium patients over 6 months



Notes

- The study was undertaken on 30 babies aged 2 to 11 months, with an average age (mean age) of 5 months
- All had mild to severe Cranial Vault Asymmetry (CVA)
- All were provided with a SleepCurve mattress
- Results were compared with a historical group of similar age with positional plagiocephaly treated using repositioning therapy only
- Only one baby with mild Plagiocephaly showed no improvement
- 29 (97%) showed an improvement in head shape



Our Comments

Our mattresses are recognised as being very effective at preventing Plagiocephaly and Brachycephaly (Flat Head Syndrome) and we are delighted that this study provides further evidence that our mattresses can be used for the treatment of this condition.

We are also pleased that the authors compared the results of using our mattresses with a baby helmet in the treatment of Plagiocephaly. This study reported very similar outcomes for both treatments and highlighted the considerable cost savings our mattresses provide parents and medical organisation in comparison to helmets.

A comfortable sleep....a comforting thought

