calculated using Kiresuk’s formulae considering that all GAS scores had the
same importance (non weighted T-score) or weighting GAS scores according to
its importance for participation and activity (weighted T-score). Means of raw
scores were then calculated according to the same weighting criteria. Normal
distribution of T-scores and means were assessed by a Kolmogorov-Smirnov
test and their correlation by Spearman’s Rho.

A total of 541 GAS scales were included, out of which 537 GAS have been
analyzed, concerning 139 botulinum treatments. T-scores (56.77 ± 10.2)
and means of raw scores (0.49 ± 0.74) were highly correlated ($P = 0.99$). Weighted
T-scores and weighted means had a normal distribution. Non weighted T-scores
and means did not have a normal distribution ($P = 0.013$ and 0.011).

As T-scores and means of raw scores were highly correlated in our study, it seems
sensible to replace T-score calculation by a simple manual calculation of a mean of
raw scores in clinical daily practice. Calculating T-scores does not necessarily
imply that the distribution of T-scores will have a normal distribution. Implication
are discussed in term of group effects interpreted through T-scores.

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Cervicocephalic correction mattress: A new therapy in
plagiocephaly and torticollis

J. Durigneux a,*, M. Dinomais b, B. Chevalier b, L. Marquois c, G. Payneau c, X. Deris a

a CRRRF:Angers, rue des Capucins, BP 40329, 49103 Angers cedex 02, France
b Kinésithérapeute libéral, Angers, France
c Entreprise Proteor, Angers, France

*Corresponding author.
E-mail address: julien.durigneux@c3rf-angers.asso.fr.

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Introduction.– The rising incidence of plagiocephaly is documented since 1992
and the adoption of supine sleep position. The present therapy included
repositioning interventions and physiotherapy orthotic. An exclusive cranial
correction (helmet) is widely accepted in severe positional plagiocephaly with
variable tolerance. We developed a mattress to act to plagiocephaly and also the
limited head rotation.

Method.– A prospective study of 18 infants (middle-age: 5 months) with
nonsynostotic plagiocephaly and limited head rotation. Two-dimensional head
tracings were taken for each infant, before and after therapy. We obtained
Cephalic Index (CI) for the brachycephaly and Cranial Vault Asymmetry Index
(CVAI), and we classified each infant in five degree of severity of plagiocephaly
(five is the most severe) with the CVAI.

Results.– After therapy we obtained a decrease of CVAI 8.69 to 5.33
($P < 0.0001$, paired t test) and plagiocephaly severity degree 3.6 to 5.33
($P < 0.0001$, paired t test) without modification of CI 0.91 versus 0.92
($P = 0.503$, paired t test). The result is correlated to the beginning age of therapy
($P = 0.008$). More the therapy begins early more it’s effective.

Discussion and conclusion.– We demonstrated the efficacy of the mattress for
the cranial asymmetry. The mattress doesn’t increase the brachycephaly (CI).

Further reading

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