Infantile colic and chiropractic spinal manipulation

Editor,—We congratulate Olafsdottir et al on their article.1 The sum of the evidence on spinal manipulative therapy (SMT) in the treatment of infantile colic now is that there are 3 randomised controlled trials (RCTs) on the subject. Two RCTs demonstrated a significant positive effect of SMT;1 2 and 1 RCT was unable to demonstrate any treatment effect.1

The reasons for this discrepancy are not known, but Olafsdottir et al suggest that their finding of no effect of SMT may be due to the blinding of the infants’ mothers. Another equally likely explanation could be that we are witnessing a dose response phenomenon.

In their trial, Olafsdottir et al used a treatment protocol of a maximum of 3 sessions of SMT, whereas the other 2 RCTs, which found a positive treatment effect, used a treatment protocol relying more on the treating chiropractor’s clinical judgement. This more pragmatic approach resulted in 64% of the infants in one RCT receiving 4 or more sessions of SMT (with a maximum of 7), and the majority of infants in the other RCT receiving up to 6 sessions.1

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Letter to the Editor

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Other implications of disposable nappies

EDITOR,—Partsch, Aukamp, and Sippell propose that increased testicular temperature in early childhood might affect later spermatogenesis. They suggest that disposable nappies might contribute to this and demonstrate a significant difference between the scrotal skin temperature recorded in infants using disposable and washable nap- pies. They mention in their introductory paragraph that other environmental factors may be important in the deterioration seen in male reproductive health over recent years, but do not relate any of these factors to disposable nappies.1

There are many concerns about the use of disposable nappies in addition to increasing scrotal temperature that may impact on fertility and general health. The disposable nappy consists of a plastic outer layer, a layer of superabsorbent chemicals and inner liner. Nappies are not subject to government controls or independent testing and disposable nappy manufacturers do not need to disclose the contents.2,3

Recently, concern has been raised about the presence of Tributyl Tin (TBT) in disposable nappies. Greenpeace and Women’s Environmental Network have commissioned research which showed that there were significant levels of TBT in many brands of disposable nappy, including those on sale in this country.4 It may be in contact with up to 3.6 times the WHO’s estimated tolerable daily intake. TBT is an environmental pollut- ant which is used in anti-fouling ship paint. It is known to disrupt the endocrine and immune systems of marine life and there are international plans to phase out its use.

The superabsorbent chemicals used include sodium polyacrylate crystals which can be seen on the skin in contact with it and there are particular concerns about this entering the body through broken skin in the nappy area. Sodium polyacrylate, along with other chemical constituents that increase absorbency, has been removed from tampons as it was associated with the development of Toxic Shock Syndrome.5 The inner liner has previously been shown to contain nonylphe- nyl ethoxylate, which acts as an oestrogen mimic, and dioxins.6

In addition, the use of disposable nappies has important environmental consequences which may impact on child health. Manufacture of disposable nappies uses 3.5 times more energy, 8 times as many non-renewable resources, and 90 times as many renewable resources when compared with washable nappies. The description of such nappies as “disposable” is misleading. In this country, nappies make up approximately 4% of household waste (800 000 tonnes per year) and every disposable nappy and its contents ever used is still present in a landfill site.7

There are environmentally friendly and safe alternatives to the disposable nappy. Modern washable nappies are very different from the traditional idea of buckets of “terries”. There are now shaped cotton nappies with velcro fastenings, alternatives to nappy pins, breathable covers, and disposable, paper inner liners. Concern that the inci- dence of nappy rash is higher with washable nappies is unfounded—it has been shown that it is the length of contact of urine with the skin that is most important in the development of nappy rash and it may be that an infant in a disposable has more chance of developing nappy rash as they are often changed less frequently than an infant in washable nappies. In addition, there are cost savings both to individuals and organisa- tions using washable nappies, and there have been several successful hospital projects using washable nappies on postnatal wards.1,8

As paediatricians committed to the health of children, we should be aware of the issues raised by the use of disposable nappies, the alternatives that exist, and sources of infor- mation and support for parents who are concerned about ensuring a safe and sustainable future for their children.

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4 Greenpeace. Greenpeace calls on parents to return contaminated nappies to producers: new tests show that TBT-free nappies are a rarity. Press Release 19th May 2000 www.greenpeace.org

Dexamethasone, survival, and neurological impairment

EDITOR,—Professor Pharoah questions whether the increased rate of cerebral palsy among newborn infants who were randomly allocated early postnatal dexamethasone therapy in the trial by Shinwell et al9 might be because dexamethasone increased survival of infants who were impaired before birth, and not because dexamethasone caused cerebral impairment.10

However, two recent systematic reviews of randomised trials of postnatal dexametha- sone therapy in infants at risk of chronic lung disease do not support this hypothesis. Half- day and Ehrenkranz found no difference in survival in trials of dexamethasone given within 96 hours of birth.11 Doyle and Davis found no difference in survival, overall or in any subgroups, in trials of dexamethasone therapy at any time after birth.12 Both reviews concluded that postnatal dexamethasone may cause neurological dysfunction and called for further trials with appropriate follow up.

Professor Doyle is currently co-ordinating such a trial in infants under 1000 g or less than 29 weeks who are ventilated after 7 days from birth (the DART study, Dexametha- sone in tiny infants—a Randomised Trial). Those interested in participating in this important study are very welcome to contact him at d.doyle@obgyn-rwh.unimelb.edu.au.

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NOTICE

Notice of duplicate publication


The same data, resulting from a single pilot study, were reported in the two above papers. The authors have apologised, explaining that they had not intended to flout accepted aca- demic standards, rather that they wished to bring their findings to the attention of two separate readerships—namely paediatricians and nurses. However, we would not wish compilers of systematic reviews to include these data twice and therefore we give notice of duplicate publication and withdraw the article published in Archives of Disease in Childhood.