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Speakers



Francesco Cerritelli, PhD, DO

Abstracts

Since decades, the WHO has been encouraging multidisciplinary collaborations to enhance quality of practice. This led to include some traditional, complementary and alternative medicines within health care services. In the context of Neonatal Intensive Care Units (NICU), team working has been tested since mid 90s to implement procedures and deliver better practices. However, to date, a fully integration of multidisciplinary collaborations is still limited, although promising results in terms of clinical effectiveness and reduction of costs.

The lecture will aim to: 1) report the osteopathic research published in NICU setting; 2) summarise the evidence 3) open a discussion table of value to government policy-makers, regulators, researchers and health-care practitioners to debate on better evidence-based multidisciplinary practices.



Andrea Manzotti, DO



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Sung-Joo Forment, DO

### Plagiocephaly: Towards a new conception of the osteopathic approach?

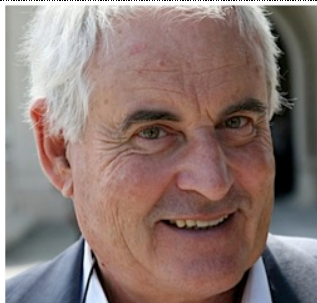
Forment SJ, Dugailly P-M

Osteopathic approach of the infant cranium is a usual application performed in the treatment of cranial deformities. The latter principally concerns the non-synostotic types of plagiocephaly involving various morphometric changes of the cranial vault defined as the occipital plagiocephaly, the scaphocephaly and the brachycephaly. Non-synostotic plagiocephaly is related to physical mechanisms as traction/compression applied before, during or after birth. Moreover, various predisposing factors are reported such as maternal age, twins/multiple gestational pregnancy, prematurity, head rotational asymmetry...

Cranial concept in osteopathy is based on previous principles related to subtle movement of the cranial bones and specific rhythm. However the latter remains very controversial according to current scientific research.

On the other hand, investigations on mechanical behaviours of the cranial sutures (mammalian model) showed specific kinesis and morphological features related to various types of loading (i.e. compression, traction, static/dynamic).

The presentation will expose (1) the main scientific findings of the literature and (2) the rationale of the new models that could be suggested regarding cranial osteopathic applications.



Florian Schwerla, MSc, DO

### Osteopathic treatment of infants in their first year of life: a prospective multicenter observational study (OSTINF-Study)

*Background:* In Germany, in recent years, ever more parents seek help from osteopaths for perceived health complaints of their infants and children. This implies an increasing demand of reliable evidence of effectiveness of an osteopathic intervention for this group of patients, yet fundamental information is lacking inevitable to plan proper intervention studies.

*Objective:* To quantitatively assess which perceived health complaints of infants are most common in osteopathic practices, what typical changes associated with the intervention, and data on safety.

*Methods:* An observational study was chosen as study design. Parents who approached an osteopathic practice with any of the following 5 disorders were included in the study: idiopathic infant asymmetry (IA), plagiocephaly (DP), feeding disorders (FD), excessive crying (EC), and sleep disorders (SD). To assess outcome, parents were asked to rate the strength of symptoms by means of outcome sheets on numerical rating scales (NRS 0-10). In DP, the head circumference of the child's skull was measured with the craniometer and the cranial vault index (CVAI) calculated therefrom.

*Results:* 230 practices agreed to participate, 151 practices returned results. 1196 infants were treated on average 2.8 times. IA was the most prevalent disorder (48%), followed by EC (18%), FD (15%) and DP (14%). In IA, the asymmetric situation on the NRS improved from 6.2 to 1.3, an improvement of 81%. At DP, the CVAI improved from 8.0% to 4.0%, an improvement of 51%. FD improved by 77%, EC by 70% (7.7 to 2.3 on the NRS) and SD by 56%. Reactions to osteopathic treatment occurred in only about 3.5% of all treatments, probably reflecting typical day-to-day variation of symptoms. In a total of 3212 treatments, there was not a single negative reaction affecting the baby's health.



*Conclusions:* Osteopathic treatment was associated with major positive changes of the severity of perceived health complaints as assessed by parents, typically back to normal. Osteopathic interventions proved as a save treatment modality across a large number of therapists. On the basis of these results so-called intervention studies should be planned and realized.



**Dawn Carnes, PhD**

### **Effectiveness of common interventions for the treatment of infantile colic, positional plagiocephaly and congenital muscular torticollis**

Julie Ellwood, Jerry Draper-Rodi, Dawn Carnes

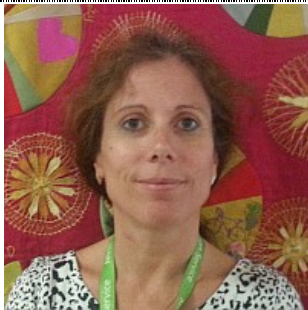
*Research question:* How does manual therapy compare with other common treatments for infantile colic, positional plagiocephaly and congenital muscular torticollis?

*Methods:* We searched the published literature in medical journals to find research articles testing the effectiveness of different treatments for infantile colic, positional plagiocephaly and congenital muscular torticollis. We extracted the data from these articles and tried to compare outcomes of the treatments. We also assessed the quality of the research to make a decision about certainty and confidence we had in the findings.

*Results:* We found: 32 articles for infantile colic, 10 articles for positional plagiocephaly and 4 articles for congenital muscular torticollis. There was moderate to strong evidence to support the use of probiotics in breastfed infants for reducing crying time. There was low to moderate to evidence to support manual therapy for reducing crying time. Both treatments were thought to be low risk. There was mixed unfavourable evidence for the use of simethicone (e.g. Infacol®). The guidelines did not recommend proton pump inhibitors (e.g. omeprazole/ Losec®) for infants with colic and they were associated with adverse reactions. Stretching was favourable for congenital muscular torticollis but there was low inconclusive evidence to support passive manual therapy. There was moderate to high level of evidence favouring manual therapy for positional plagiocephaly when compared to repositioning. There was moderate to high level of evidence that favoured repositioning therapy with or without a pillow above usual care. We found favourable but weak or low quality of evidence for helmet therapy.

*Conclusions:* There is uncertainty about the management and care of infants with colic, positional plagiocephaly and congenital muscular torticollis. In part, this is due to their unknown aetiology and self-limiting nature. Understanding parents' expectations from treatment is a key factor in being able to support these families. Preserving parent choice on management strategies for their unsettled baby in light of the limited evidence about effectiveness and safety remains difficult to balance.





Dawn Carnes, PhD

### Effectiveness and cost of osteopathic manual therapy treatment for excessively crying, distressed and unsettled infants: a randomised controlled trial

Dawn Carnes, Kevin Brownhill, Phil Bright, Karen Carroll, Roger Engel, Sandra Grace, Paul Vaucher, Steve Vogel

*Background:* Infants who excessively cry, are distressed and unsettled can have a marked impact on family life. Around 1 in 6 families are affected, it is associated with maternal depression, anxiety and loss of parenting confidence. These infant behaviors are usually self-limiting but during this difficult period many parents look for additional support. There is limited research and therefore much debate about the effectiveness of manual therapy and osteopathic care for these infants.

*Aim:* To evaluate the effectiveness and healthcare cost of osteopathic care for excessively crying, unsettled and distressed infants (< 10 weeks old).

*Method:* We propose a two-arm pragmatic randomised controlled trial to assess the effectiveness of osteopathic manual therapy component of care. We will randomise 202 parent(s)/carers and their infants to either: i) Osteopathic manual therapy with best usual care advice and support or, ii) Light touch attention control (equal time spent with infant) with best usual care advice and support. Parents will be blinded to whether their infant receives the osteopathic manual therapy care or not. This design will enable us to test whether the addition of the active osteopathic manual therapy component has more effect than non-osteopathic light touch. The cost of the delivery of the intervention will be determined and compared with data about the cost of other care.

*Population:* Healthy infants under 10 weeks old, reported by their parent(s)/carers as excessively crying, unsettled and distressed using a modified Rome IV criteria (> 3 hours of crying per day, for 3 days for 1 week or more). Infants with diagnosed health conditions for which they are receiving medical treatment will be excluded from the study.

*Outcomes:* The primary outcome is infant crying time over 14 days, collected via parent reported diaries. Secondary outcomes are: i) Parental self-efficacy ii) Parent perceived global improvement iii) Satisfaction with treatment and iv) Adverse events.

This study will provide information about the clinical and social relevance of osteopathic care for excessively crying, unsettled and distressed infants and their parents.

### Long-term consequences of premature birth

Filip Cools, MD

### Functional intestinal disorders in infancy: the traditional approach



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Yvan Vandenplas, PhD, MD

Functional gastrointestinal disorders (FGIDs) are commonplace during infancy. They cause frequent parental concern, lead to a heavy personal and economic cost to individuals and impose a relevant financial burden on public healthcare systems. Approximately 50% of infants experience at least one FGID symptom during the first year after birth. The most prevalent FGIDs – infantile regurgitation and colic – affect 30% and 20% of infants respectively. Guidelines emphasize that first-line management of these FGIDs should focus on parental reassurance and nutritional advice while drug treatment is seldom required. Since there is no organic disease, medications will not be helpful, and will mainly be responsible for adverse effects. Nutritional advice should stress the benefits of continuing breastfeeding while, in non-breastfed infants suffering from FGIDs, special infant formulas may be considered. that should be offered to parents of both breastfed and formula-fed infants.

By providing a complete and updated parental education, reassurance and nutritional advice, healthcare professionals can optimize the management of FGIDs and related symptoms and reduce the inappropriate use of medication or dietary interventions.



Samantha Fennell, DO

#### **An evidence based approach to assessment of the under one**

In this workshop delegates will gain an understanding of how we can integrate current evidence into our examination of the baby ensuring we are able to screen for potential red flags, underlying previously undiagnosed pathology and how to reassure parents with confidence of their babies health before undertaking our osteopathic intervention.

Delegates will be introduced to the underpinning theory before watching how to examine using weighted dolls and finally all delegates will have the opportunity to have a go themselves and receive feedback from their peers.

This workshop is a must for anyone who works with children under one.



#### **Primitive reflexes in relation to the motor development in the young child**

This workshop invites you to understand the role of the osteopath regarding the importance of the primitive reflexes in the newborn:

- The timing of their appearance;
- their integration; and,
- their purpose



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**Els Juliette Hellebaut, DO**

You will be able to explore the influence of birth and the positioning of the baby on the integration of the primitive reflexes. Furthermore, you will understand the relationship of the primitive reflexes to the motor development of the child. Alberta infant motor scale (AIMS) charts will be provided to each participant.

A short session will also be dedicated to the hands-on treatment of the newborn and provision of advice to parents.

**Marie-Caroline Willieme, DO**

#### **Differential diagnosis and treatment of plagiocephaly in infants**

There are essentially three types of positional plagiocephaly, each presenting a different clinic: fronto-occipital plagiocephaly, occipital-posterior plagiocephaly and bilateral plagiocephaly.

In this workshop we will see how we can approach the different types of plagiocephaly, how to treat them and especially how to prevent them.

**Francesco Cerritelli, PhD, DO**

#### **Research, collaboration and osteopathy in treating premature newborns in hospitals**

The aim of this workshop is to suggest a protocol of osteopathic care in preterm and term newborns.

The NE-O (NEonatology and Osteopathy) model was adopted in 2006 in a public hospital in Italy and then applied in other Neonatal Intensive Care Units across Europe. It is composed by specific evaluation tests and treatments to tailor osteopathic care according to preterm and term infants' needs, NICU environment, medical and paramedical assistance. This model was developed to maximize the effectiveness and the clinical use of osteopathy in the care of newborns.

Using a systematic, scientific and practical perspective, the workshop will define, discuss and put into practice the key steps for a rigorous and effective osteopathic neonatal approach, which could be also applied into NICU setting. The attendees will be provided of hands-on procedures supported by the scientific results obtained, in terms of effectiveness and safety, and the methodological sequel developed.







**Andrea Manzotti, DO**

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**Respiratory system as central element in preterms: clinical consideration and manual approach**

The participants will learn about the anatomical-functional relationships in the premature child and how pathologies affecting it can influence the physiology of the respiratory system but also influence other systems, i.e. oro-facial functions, and not least sociality.

Attendees will learn the manual osteopathic approach to the respiratory function and to the related areas.

