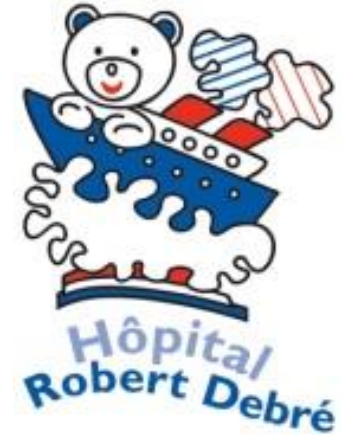




6ème Journée Pédiatrique
du Garlaban

Questions de Pratique Quotidienne

SAMEDI 18 mai 2019 - Centre de congrès Agora d'Aubagne 9h - 17h



Coliques : Quelle prise en charge en 2019 ?

Marc Bellaïche
Hôpital Robert Debré
Paris



Liens d'intérêts

danone, nestlé, picot, mead johnson, pediact, laudavie, biocodex,
sodilac, pileje

Docteur, j'en peux plus, mon Djibril, 2 mois, il rote, il péte, il dort pas, il régurgite, il a mal, il hurle, il mange bien puis pas bien. On est sous « lait sans lait », eaux de chaud, IPP, anti acides. On a fait 6 séances d'ostéopathie. La maman vous implore à l'aide

A. Je prescris double dose d'IPP

B. Je prescris des amino-acides

C. Je prescris un abonnement chez le psy

D. Je demande à la grand-mère de s'en occuper

E. Et si je prescrivais des probiotiques, comme la mère me le demande !!!...

1 Examen : URGENCE ?



Edvard Munch: Le cri



Cabinet Médical

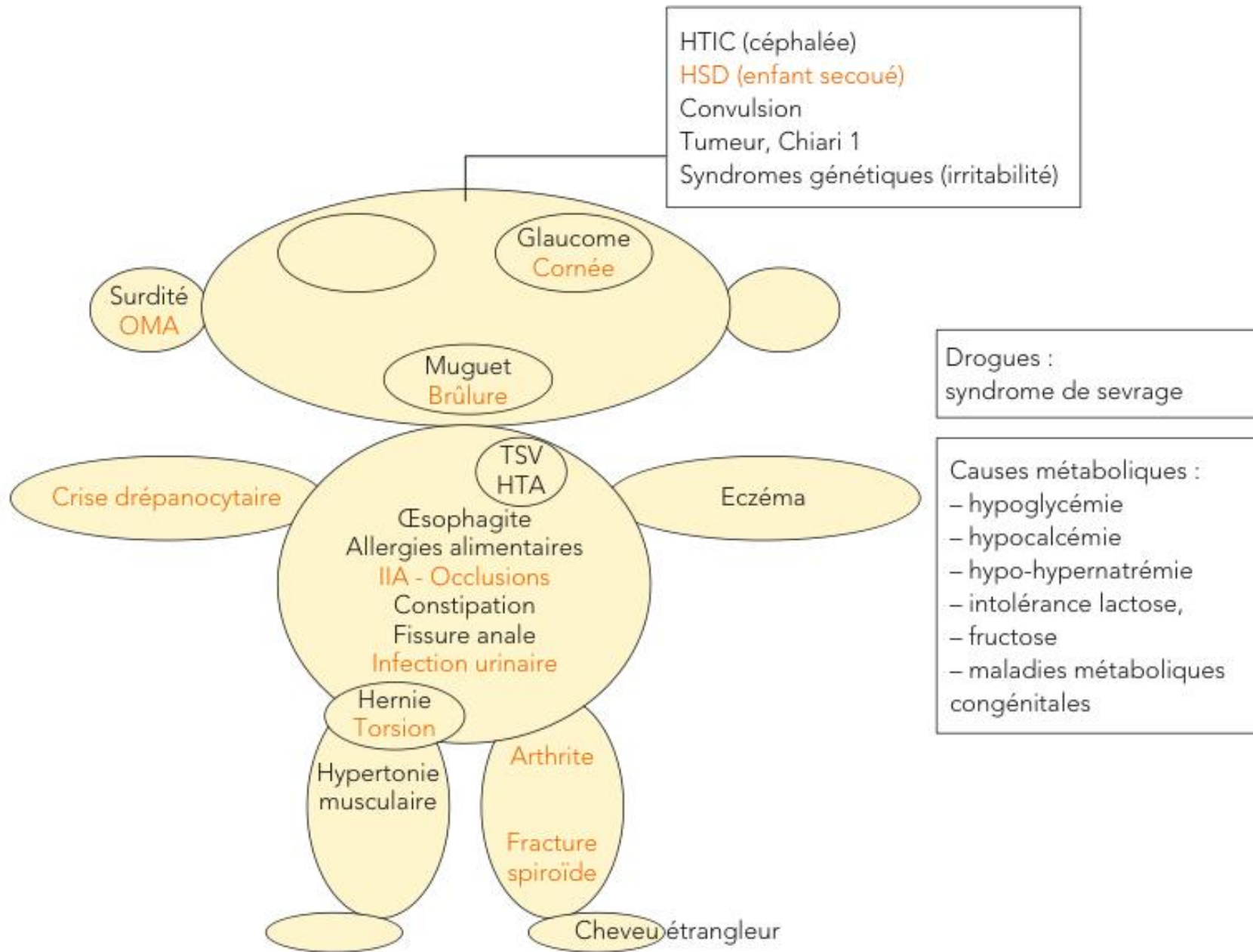
Pharmacie

P Cimetière

ACRONYME (à chacun le sien) DIAGNOSTIQUE

- I** Infection (otite, pneumopathie, méningite, pyélonéphrite)
- T** Traumatisme (crânien-HSD -HTIC, fracture)

- C** Cœur (TSV, IC, HTA)
- R** Réactions (médicaments, alimentation)
- I** Immunisation (vaccin), intoxic CO
- E** Œil (glaucome, brûlures)
- S** Chirurgie (volvulus, IIA, hernie, torsion testicule)

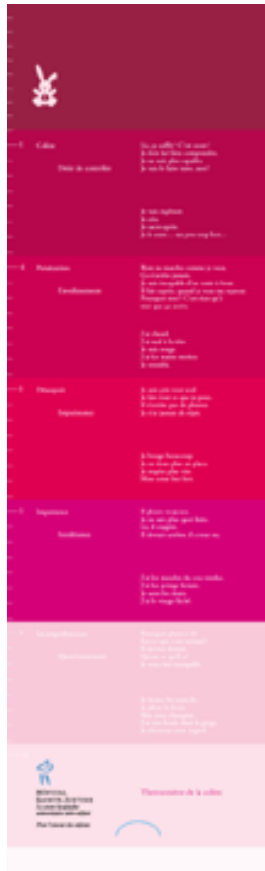


2 : Préciser



Echelle visuelle analogique



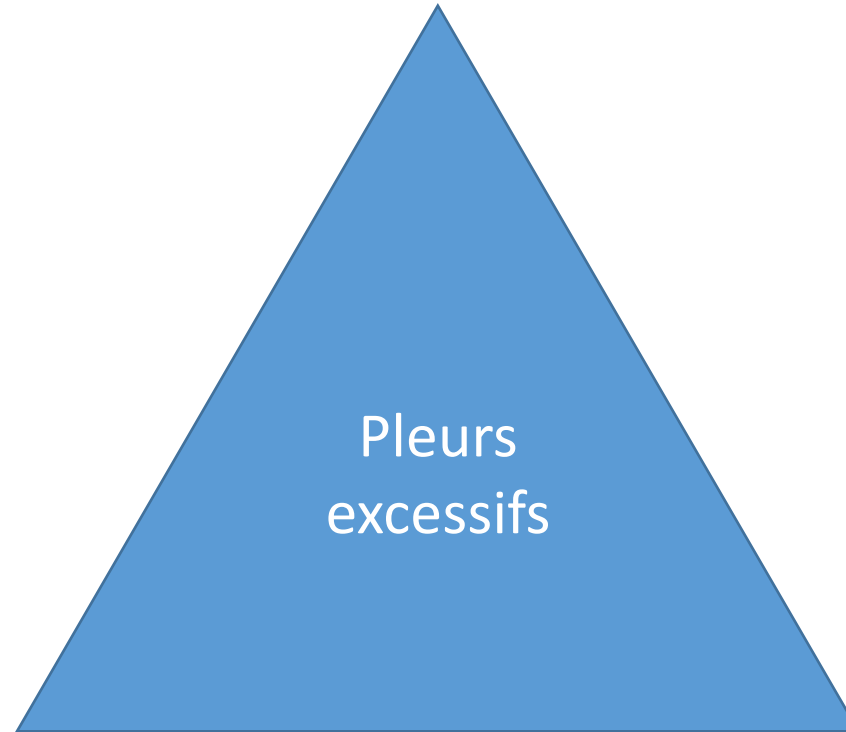


Repérer un entourage impulsif et/ou exaspéré (le «thermomètre de la colère» de l'hôpital Sainte Justine)





Comportement



Pleurs
excessifs

**Troubles digestifs :
RGO, APLV,
Intolérance au
lactose, constipation**

Environnement

Bellaiche M. Coliques du nourrisson : que proposer en
pratique ? Arch Pédiatrie 2009 ; 16 : 853-4

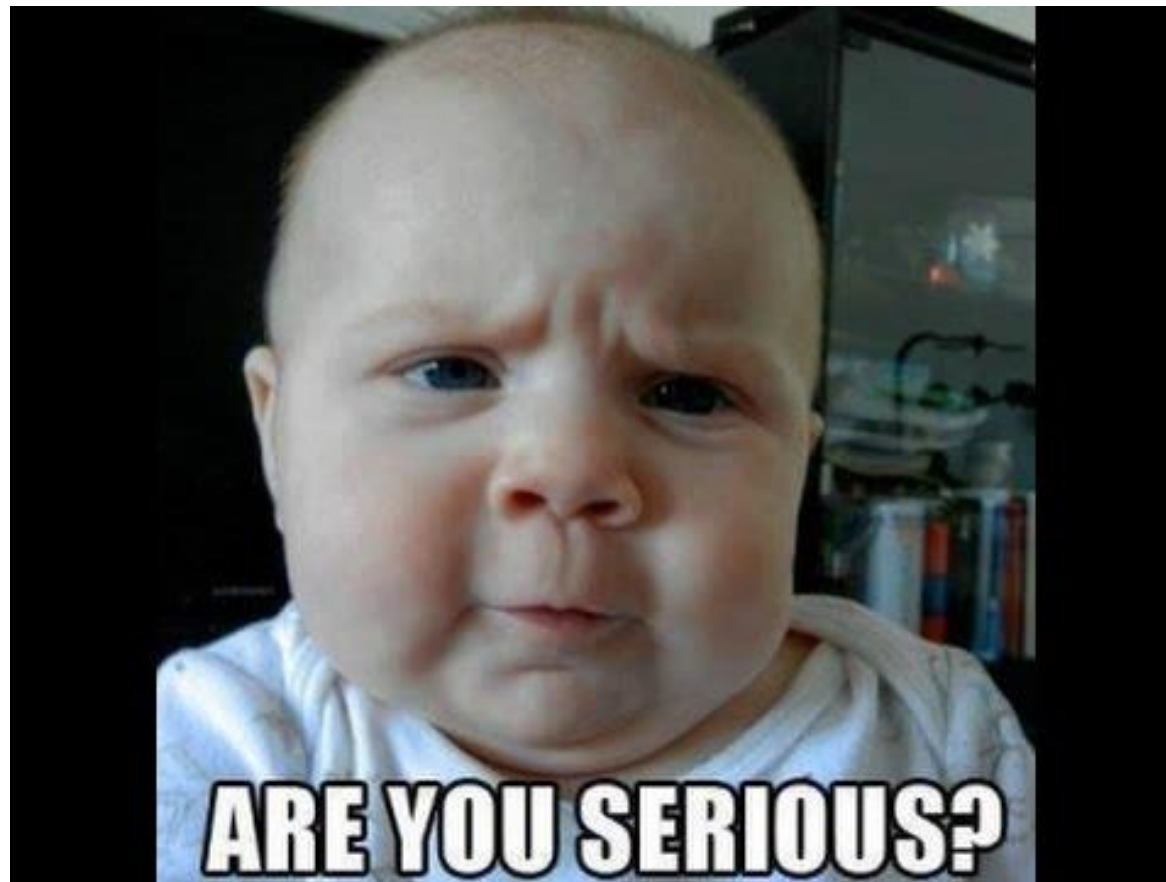
3 : Poids des mots



Gros mots...qui aggravent les maux !

- Inconsolable
- Inexpliqué
- Colique
- Douleur
- Cri
- Pas de solution
- Ce n'est rien
- Faut attendre que ça se passe ...

ATTENDRE QUE CA PASSE ?



Influence of “GERD” Label on Parents’ Decision to Medicate Infants

AUTHORS: Laura D. Scherer, PhD,^{a,b} Brian J. Zikmund-Fisher, PhD,^{c,d,e} Angela Fagerlin, PhD,^{a,d,e,f} and Beth A. Tarini, MD^g

^aVA Ann Arbor Center for Clinical Management Research, Ann Arbor, Michigan; ^bDepartment of Psychological Sciences, University of Missouri, Columbia, Missouri; and Departments of ^cHealth Behavior and Health Education, ^dCenter for Bioethics and Social Sciences in Medicine, ^eInternal Medicine, ^fPsychology, and ^gChild Health Evaluation and Research Unit, Department of Pediatrics, University of Michigan, Ann Arbor, Michigan

KEY WORDS

Gastroesophageal reflux disease, GERD, disease labels, overtreatment

ABBREVIATION

GERD—gastroesophageal reflux disease

Dr Scherer carried out analyses and drafted the initial manuscript; Drs Zikmund-Fisher, Fagerlin, and Tarini reviewed and revised the manuscript; Dr Tarini coordinated communication between researchers and clinic site; and all authors conceptualized and designed the study and approved the final manuscript as submitted.

www.pediatrics.org/cgi/doi/10.1542/peds.2012-3070

doi:10.1542/peds.2012-3070

© 2013 American Academy of Pediatrics



WHAT’S KNOWN ON THIS SUBJECT: Medications used to treat gastroesophageal reflux disease (GERD) are some of the most widely used medications in children younger than 1 year. There are strong indications that GERD is overdiagnosed and overtreated.



WHAT THIS STUDY ADDS: The factors that drive overtreatment of GERD are not well understood, but it has been proposed that the use of the GERD disease label could perpetuate use of medication. In this study we find evidence for this possibility.

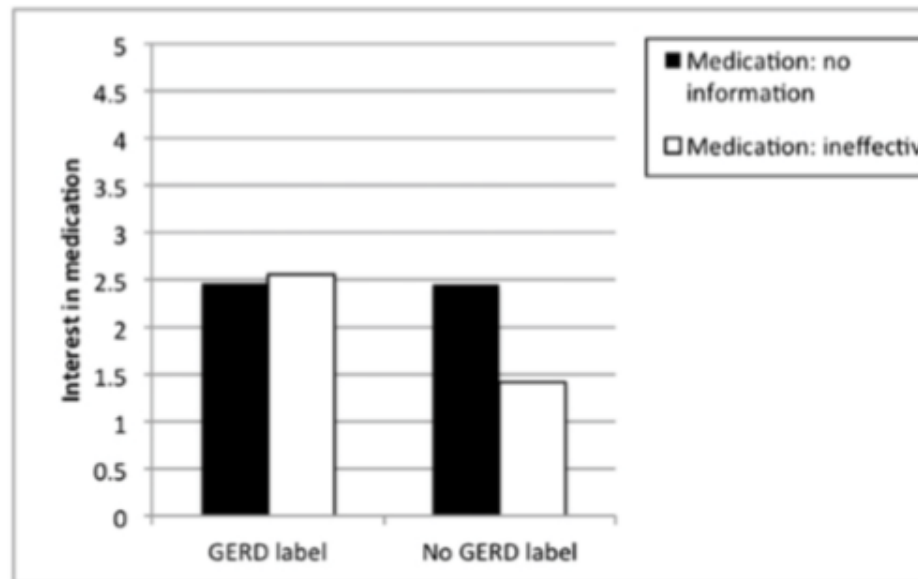


FIGURE 2

Parent interest in medication. Higher numbers indicate greater interest in medicating infants.

abstract



BACKGROUND: The factors that drive overtreatment of gastroesophageal reflux disease (GERD) are not well understood, but it has been proposed that the use of the “GERD” disease label could perpetuate use of medication in otherwise healthy infants.

METHODS: To determine if use of the disease label GERD influences parents’ perceived need to medicate an infant, we surveyed parents in a general pediatric clinic. Parents were given a hypothetical clinical

4 Expliquer



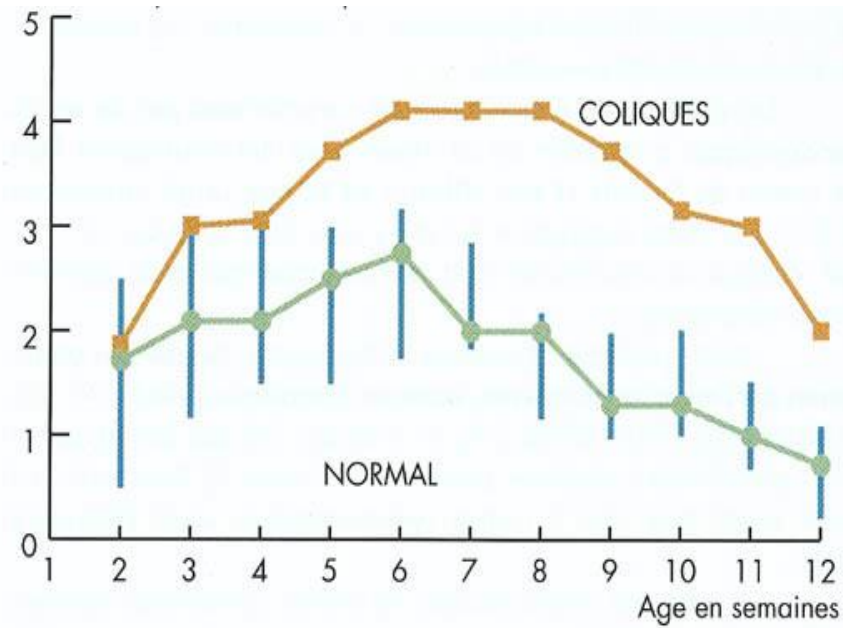
4 Expliquer



4 Expliquer

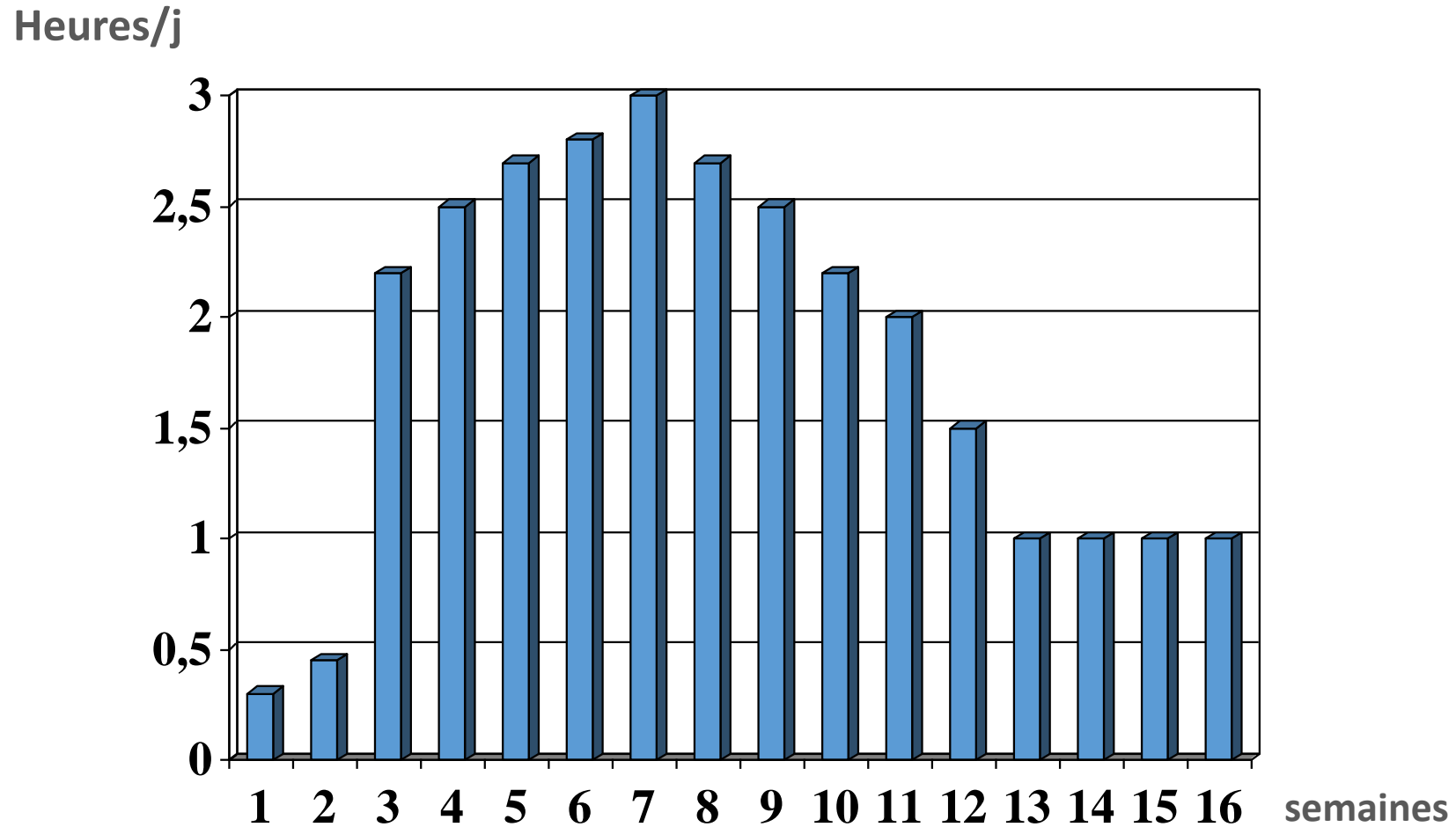


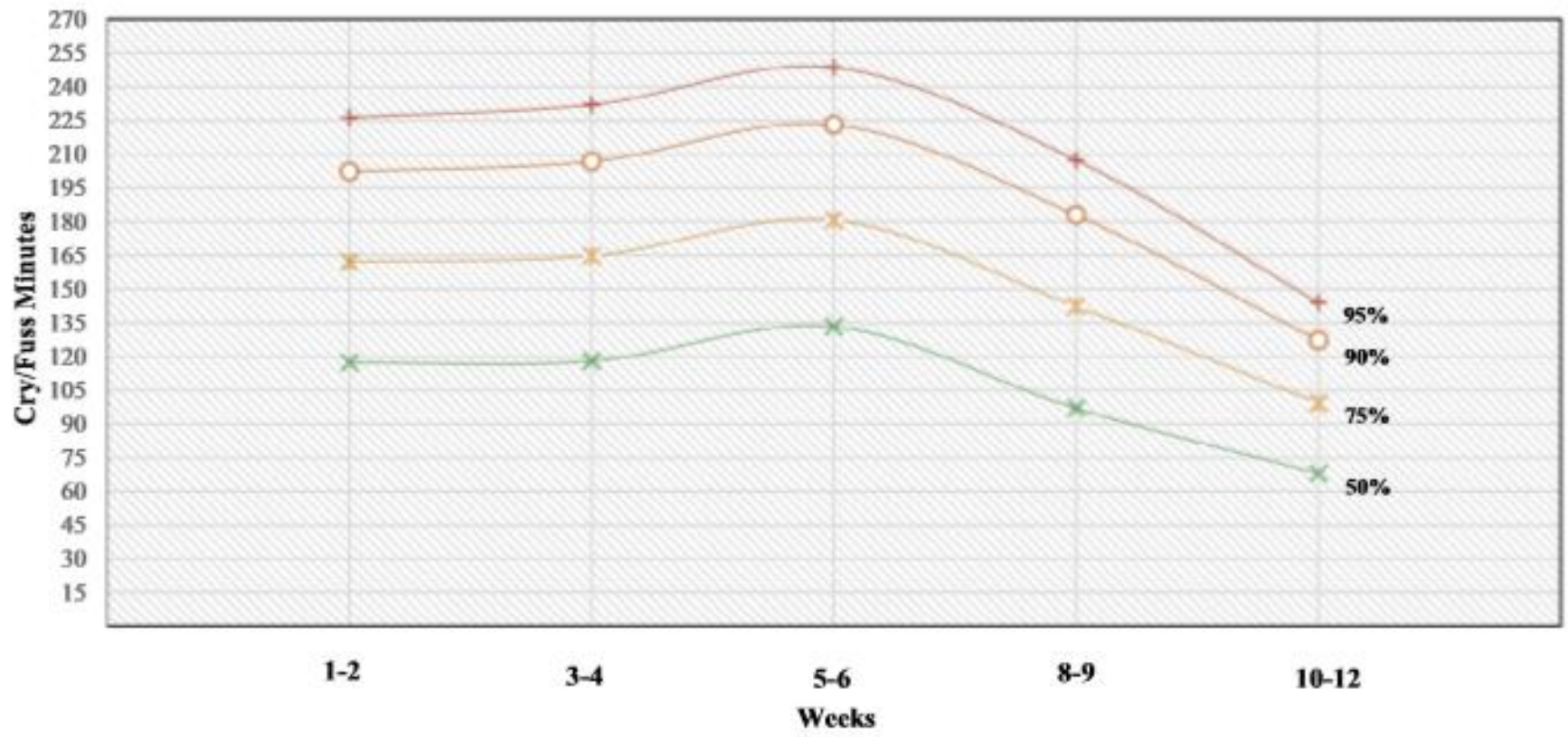
Durée de pleurs quotidiens



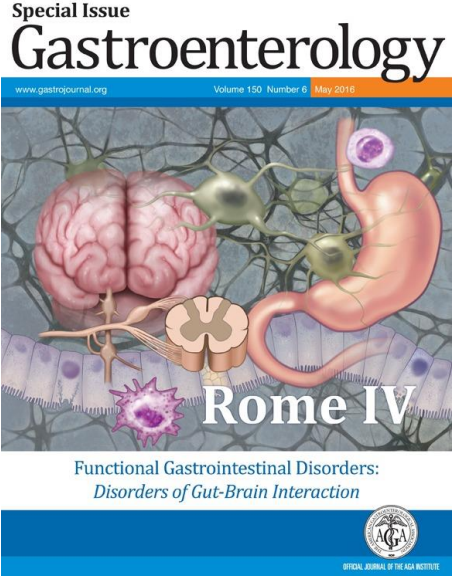
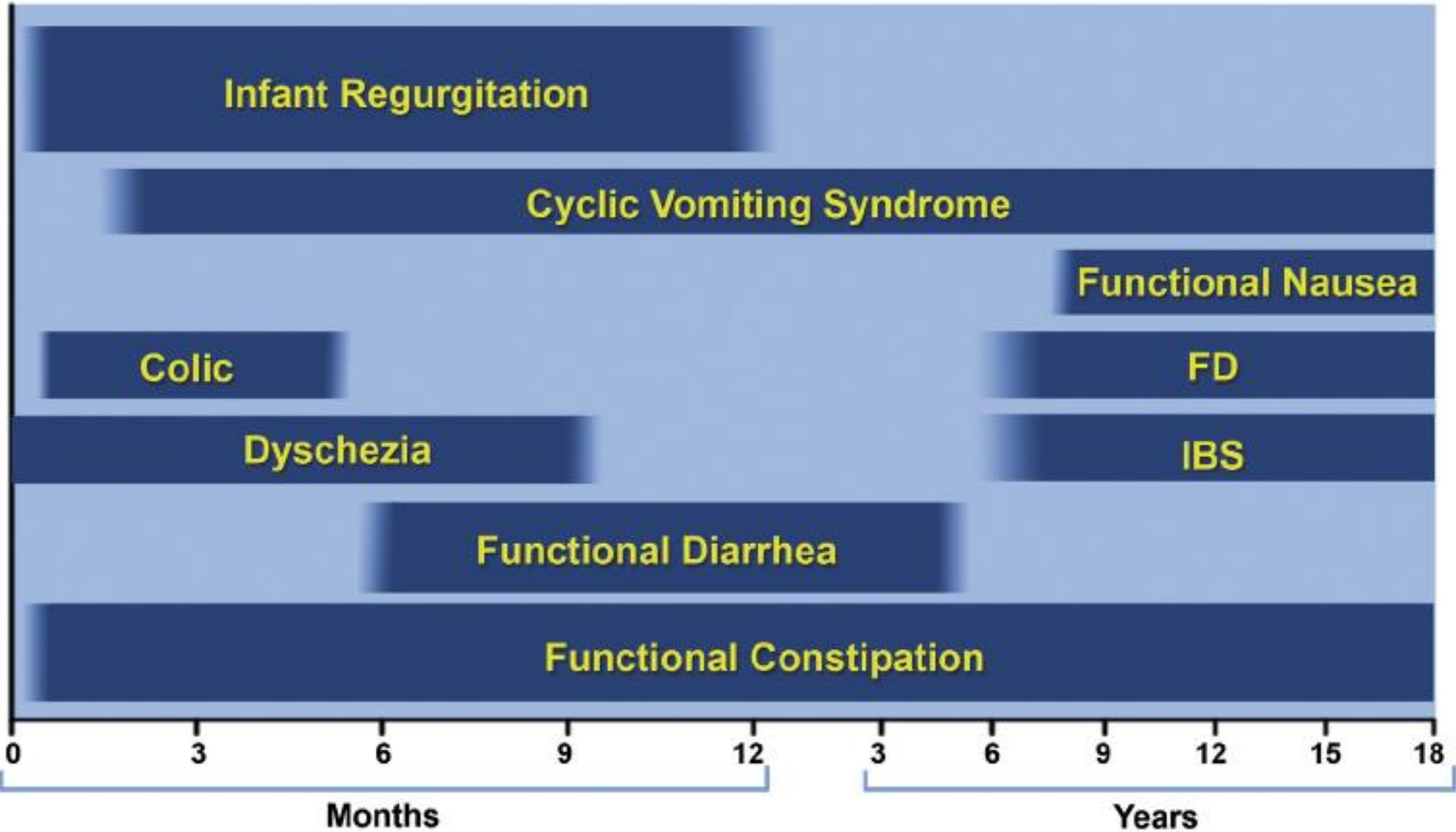
BRAZELTON TB. Crying in infancy. Pediatrics 1962 ; 29 :579-88.

Pleurs physiologiques au cours des 4 premiers mois





Rome IV



G4. Diagnostic Criteria for Infant Colic

For clinical purposes, must include all of the following:

1. An infant who is <5 months of age when the symptoms start and stop
2. Recurrent and prolonged periods of infant crying, fussing, or irritability reported by caregivers that occur without obvious cause and cannot be prevented or resolved by caregivers
3. No evidence of infant failure to thrive, fever, or illness

“Fussing” refers to intermittent distressed vocalization and has been defined as “[behavior] that is not quite crying but not awake and content either.” Infants often fluctuate between crying and fussing, so that the 2 symptoms are difficult to distinguish in practice.

For clinical research purposes, a diagnosis of infant colic must meet the preceding diagnostic criteria and also include both of the following:

1. Caregiver reports infant has cried or fussed for 3 or more hours per day during 3 or more days in 7 days in a telephone or face-to-face screening interview with a researcher or clinician
2. Total 24-hour crying plus fussing in the selected group of infants is confirmed to be 3 hours or more when measured by at least one prospectively kept, 24-hour behavior diary

Ressenti des familles,
dépassées ou anxieuses face à
pleurs prolongés et répétés

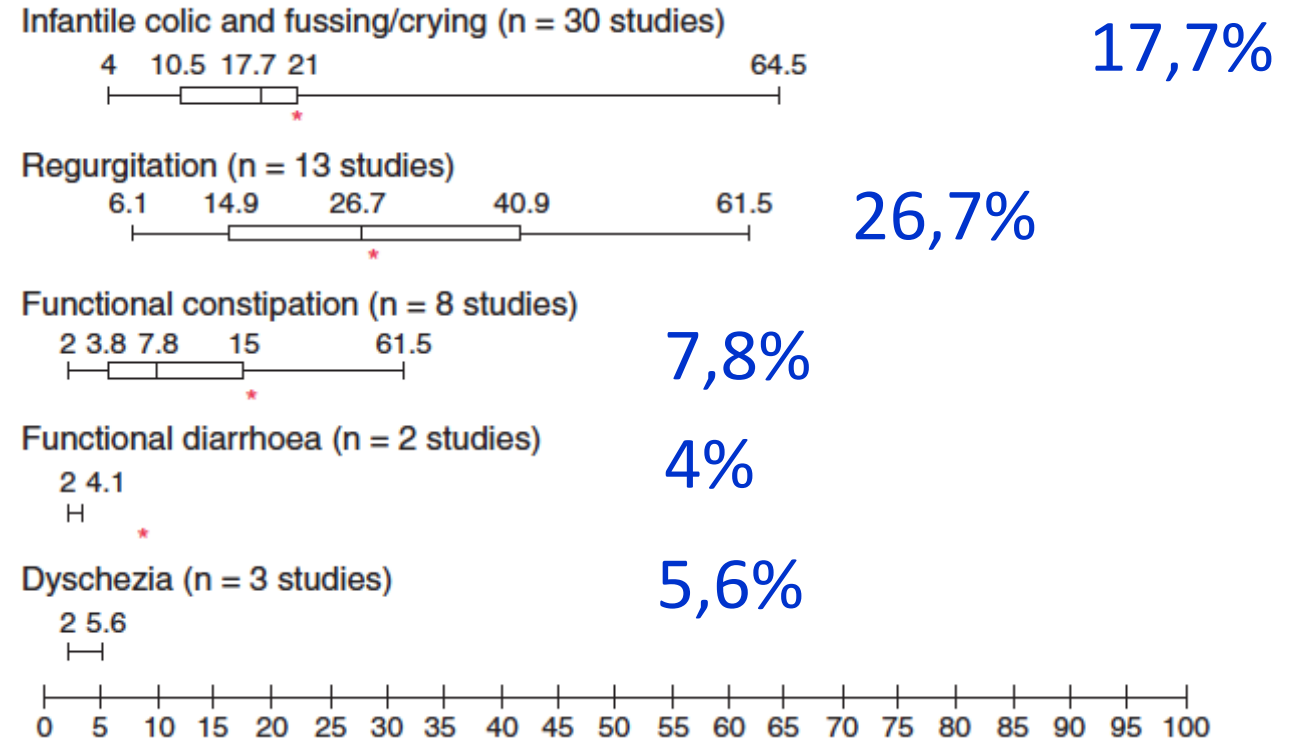
Herman, 2007

Prévalence moyenne



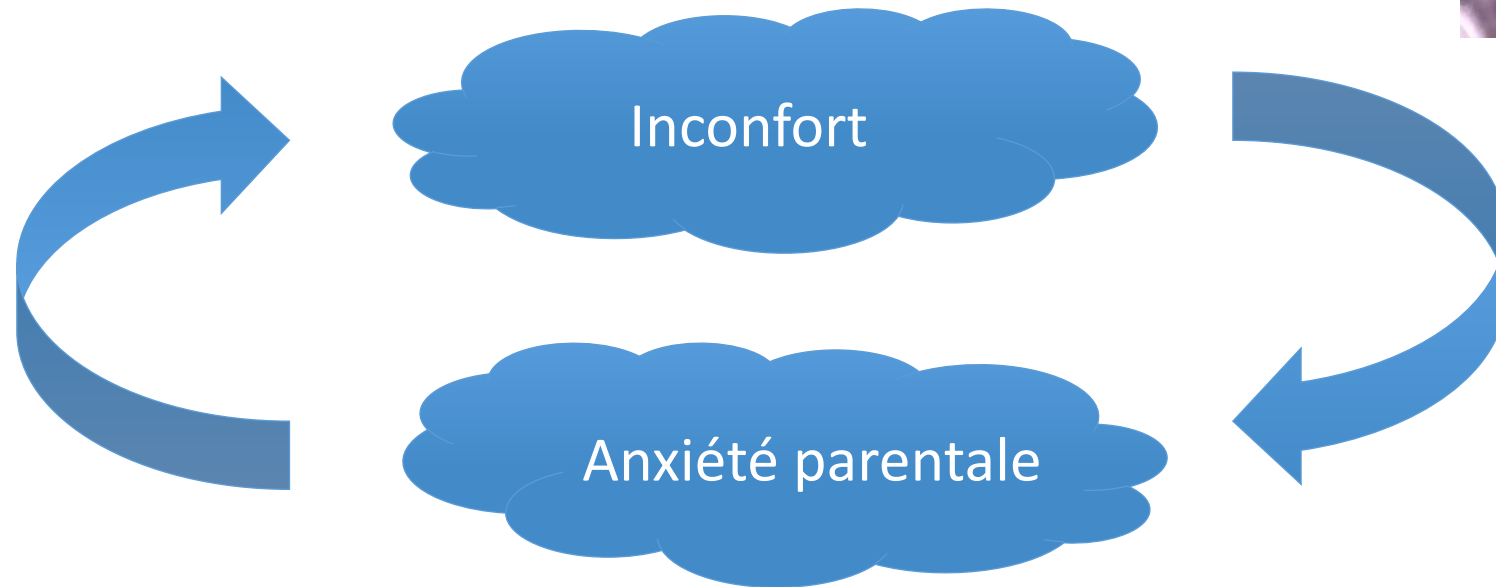
Prevalence and Health Outcomes of Functional Gastrointestinal Symptoms in Infants From Birth to 12 Months of Age

*Yvan Vandenplas, †Abdelhak Abkari, ‡Marc Bellaiche, §Marc Benninga,
||Jean Pierre Chouraqui, ¶FügenÇullu Çokuđrap, #Tracy Harb, **Badriul Hegar,
††Carlos Lifschitz, ‡‡Thomas Ludwig, §§Mohamed Miqdady, ||||Mauro Batista de Morais,
¶¶Seksit Osatakul, ##Silvia Salvatore, ***Raanan Shamir, †††Annamaria Staiano,
‡‡‡Hania Szajewska, and §§§Nikhil Thapar



Dyade mère enfant

- La naissance : orage émotionnel
- Notion d'accordage / réaccordage maternel







Fathers make a difference: positive relationships with mother and baby in relation to infant colic

C. P. Alexander,^{*} J. Zhu,[†] I. M. Paul[‡] and K. H. Kjerulff[§]

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[†]Division of Biostatistics and Bioinformatics, Department of Public Health Sciences, College of Medicine, Penn State University, Hershey, PA, USA

[‡]Division of Academic General Pediatrics, Departments of Pediatrics and Public Health Sciences, College of Medicine, Penn State University, Hershey, PA, USA, and

[§]Division of Health Services and Behavioral Research, Departments of Public Health Sciences and Obstetrics and Gynecology, Penn State University, Hershey, PA, USA

Accepted for publication 1 January 2017

Summary

Background Maternal psychological factors like depression, anxiety and stress have been associated with infant fussiness or colic. However, little research exists on whether positive factors such as social support and the happiness of the mother–partner relationship are associated with lower rates of infant fussiness or colic.

Objectives We investigated the association between infant colic and three types of maternal support: general maternal social support (during pregnancy and post partum), the happiness of the mother–partner relationship (during pregnancy and post partum) and partner involvement in caring for the newborn.

Methods Participants were 3006 women in the First Baby Study, a prospective study of the effect of mode of first delivery on subsequent childbearing. Women were interviewed by telephone during pregnancy and 1 month after first childbirth and asked about social support and if their baby had a variety of problems since birth, including ‘Colic – crying or fussiness three or more hours a day’. Multivariable logistic regression models were used to model the association between maternal support and infant colic, controlling for confounders, including maternal race or ethnicity, insurance, marital status, smoking, mode of delivery, maternal post-partum depression, breastfeeding, other neonatal illnesses and newborn gestational age.

Results Infant colic was reported by 11.6% of new mothers. High general maternal social support (in comparison with low), measured during pregnancy, was associated with lower reported infant colic (adjusted odds ratio (AOR), 0.55, 95% confidence interval (CI), 0.40–0.75) and measured post partum (AOR, 0.51, 95% CI, 0.39–0.67); high relationship happiness (in comparison with low), measured during pregnancy (AOR, 0.71, 95% CI, 0.54–0.93), and measured post partum (AOR, 0.22, 95% CI, 0.12–0.40); and high partner involvement with newborn care (in comparison with low) (AOR, 0.60, 95% CI, 0.44–0.81).

Conclusion Higher levels of maternal social support during pregnancy and post partum are associated with lower rates of maternal reported infant colic.

Keywords

fathers, infantile colic, maternal support, post partum, social support

Correspondence:

Kristen H. Kjerulff, PhD, MA, Department of Public Health Sciences, Penn State University College of Medicine, A210, 90 Hope Drive, Hershey, PA, USA 17033

E-mail: kkjerulff@psu.edu



Microbiote et coliques

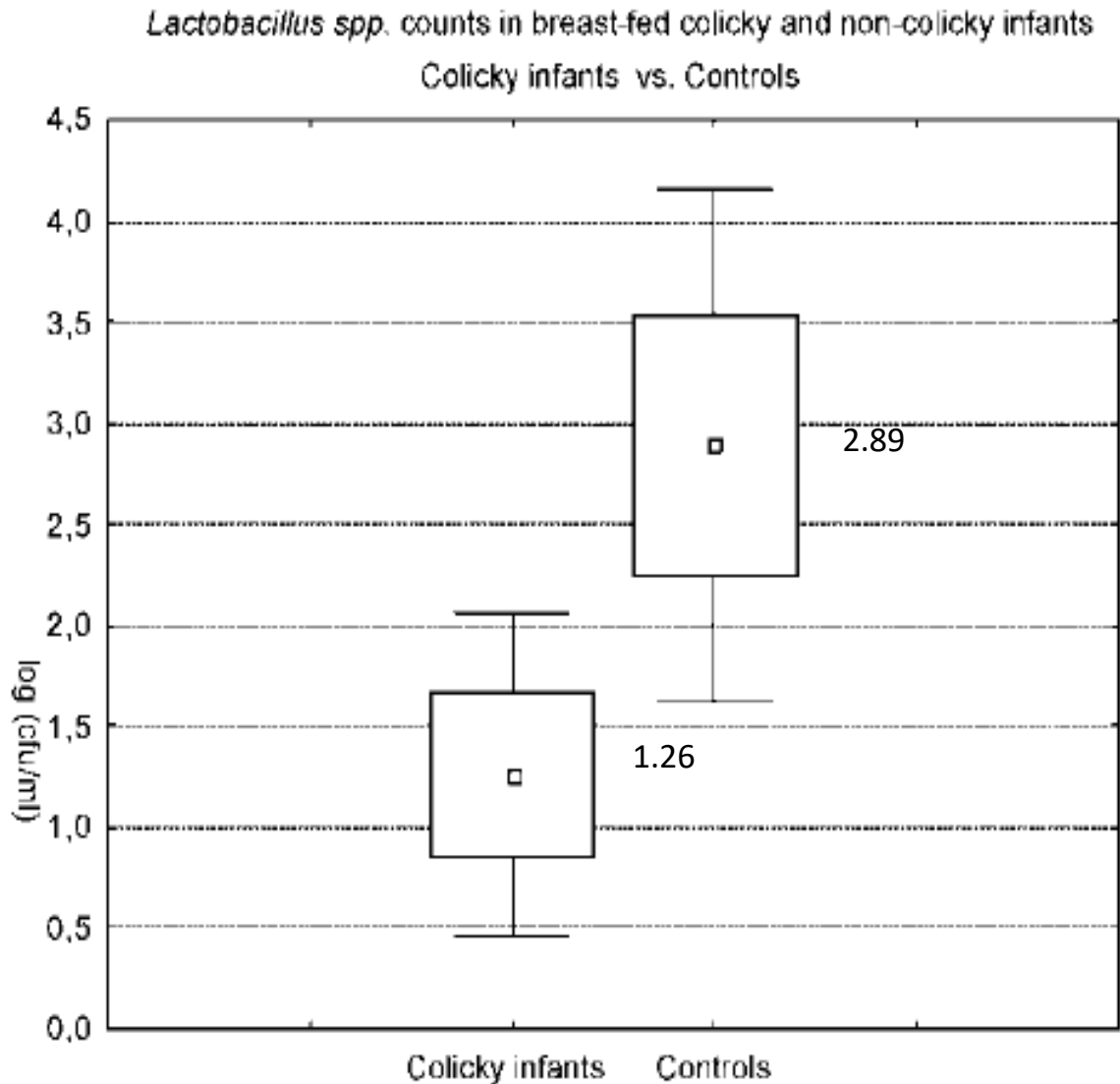
- Objectif
 - Analyse de la flore fécale de nourrissons présentant des coliques vs sans coliques
- Méthode
 - N=71 (42 avec coliques ou 29 contrôle)
 - âgés de 15 à 60 jours
 - allaitement maternel exclusif

Table 1. Clinical characteristics (mean \pm SD) of the study population.

	Colicky (n = 42)	Non-colicky (n = 29)	Statistical analysis
Gender (M/F)	20/22	15/14	n.s.
Age at the study entry (wk)	3.1 \pm 0.5	3.3 \pm 0.6	n.s.
Type of delivery (vaginal birth/Caesarean section)	25/17	16/13	n.s.
Number of siblings (firstborns/others)	35/7	23/6	n.s.
Birthweight (g)	3304.14 \pm 349.8	3280.56 \pm 321.5	n.s.
Race (caucasoid/others)	38/4	25/4	n.s.
Crying time/day (min/d)	297 \pm 33.6	102 \pm 32.3	<i>p</i> = 0.00 CI 95%: 179.01–210.99

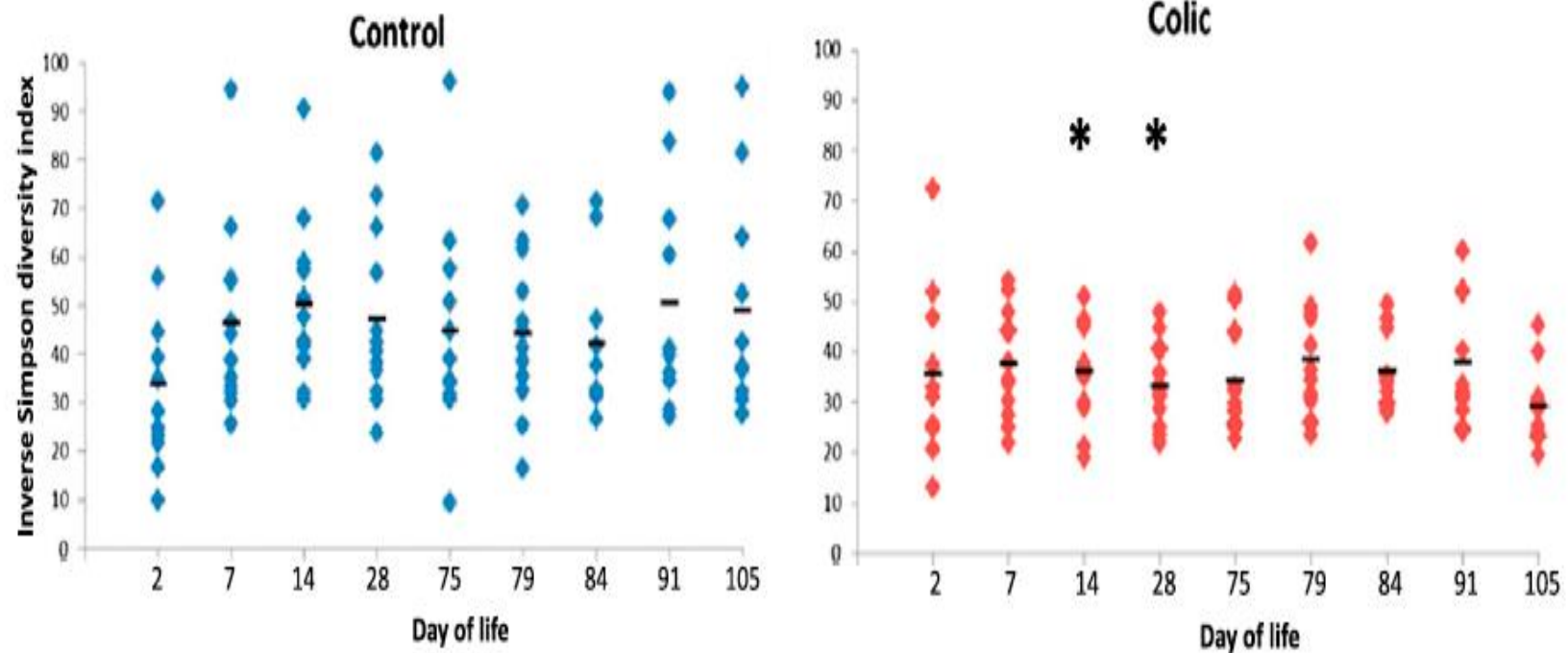
Savino et al. Intestinal microflora in breastfed colicky and non-colicky infants. Acta Paediatrica 2004; 93:825-829

Résultats



- Les nourrissons **sans** coliques présentent plus souvent de lactobacilles dans leur flore: 44% vs 19% ($p=0.044$)
- Et les nourrissons **sans** coliques ont une flore **plus riche en lactobacilles** ($p=0.029$)

Coliques et diversité microbienne



RESEARCH ARTICLE

Open Access

Antagonistic effect of *Lactobacillus* strains against gas-producing coliforms isolated from colicky infants

Francesco Savino^{1*}, Lisa Cordisco², Valentina Tarasco¹, Emanuela Locatelli¹, Diana Di Gioia³, Roberto Oggero¹ and Diego Matteuzzi²

Table 1 Clinical characteristics of the study population and count of total coliforms bacteria

	Colicky infants (n = 45)	Controls (n = 42)	p-value
Gender (M/F)	25/20	24/18	1.000**
Age at recruitment (days)	42 (15-95)	39 (17-98)	0.788*
Type of delivery (spontaneous/caesarean)	27/18	23/19	0.668**
Birth weight (grams)	3300 (2550-3970)	3350 (2520-4010)	0.951*
Crying time (minutes per day)	225 (185-310)	105 (60-135)	0.000*
Average count of total coliform bacteria (log ₁₀ CFU/g of faeces)	5.98 (2.00-8.76)	3.90 (2.50-7.10)	0.015*

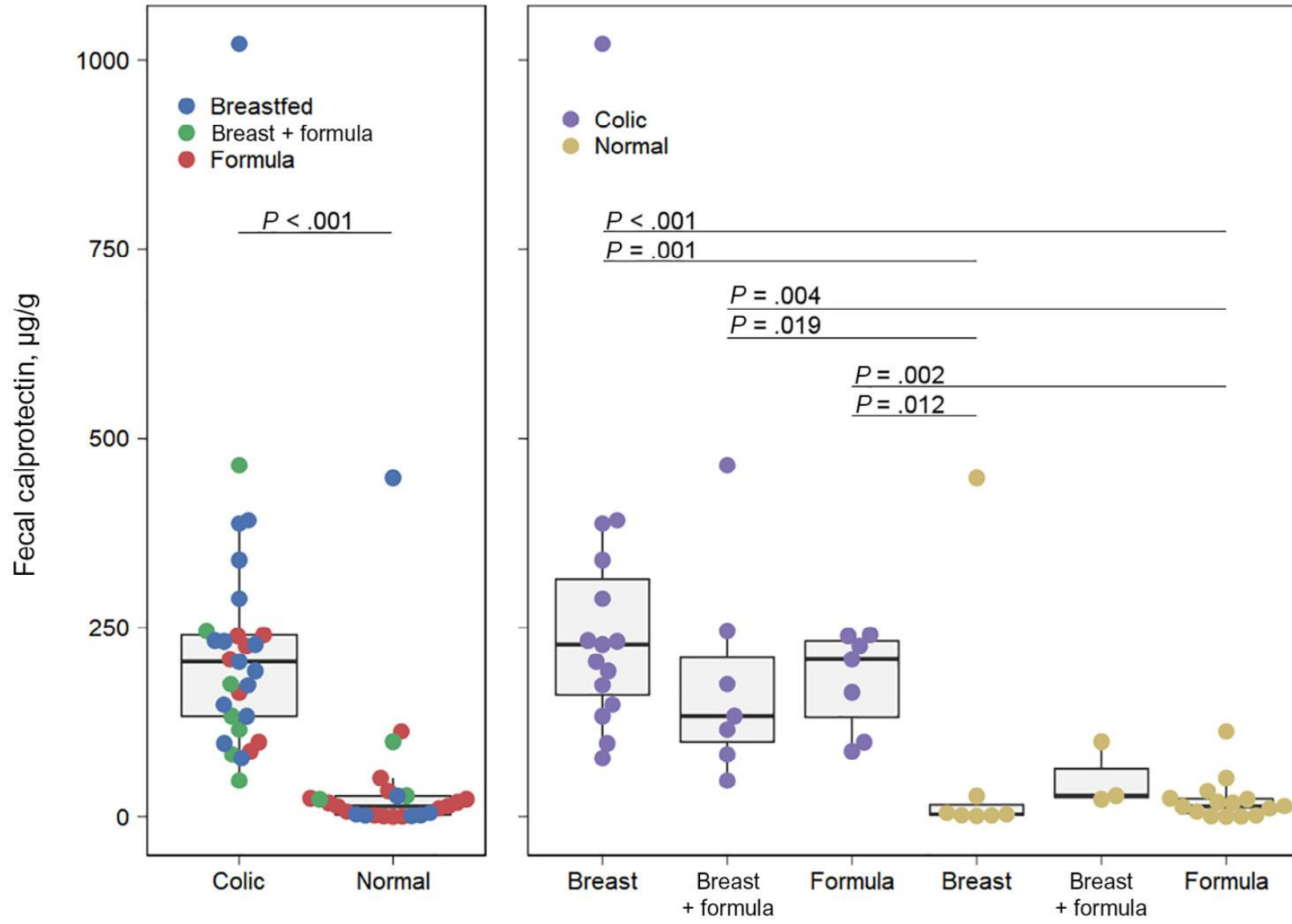
Data are expressed as median (range) or numbers.

*Mann-Whitney Test.

**Fisher's Exact Test

Table 3 Identification of the strains isolated from faeces of colicky infants at the species level and % of each species of the total colonies isolated from the faeces examined

Coliform identification	Quantitative detection (%)
<i>Escherichia coli</i>	55.45
<i>Klebsiella oxytoca</i>	22.15
<i>Klebsiella pneumoniae</i>	12.34
<i>Enterococcus faecalis</i>	6.20
<i>Enterobacter aerogenes</i>	2.70
<i>Enterobacter cloacae</i>	2.50




Rhoads et al
 Infant Colic Represents Gut
 Inflammation and Dysbiosis
J of Ped, 2018; 203:55-61.e3

5 : prendre en charge



Y a-t-il une solution ?

Oui



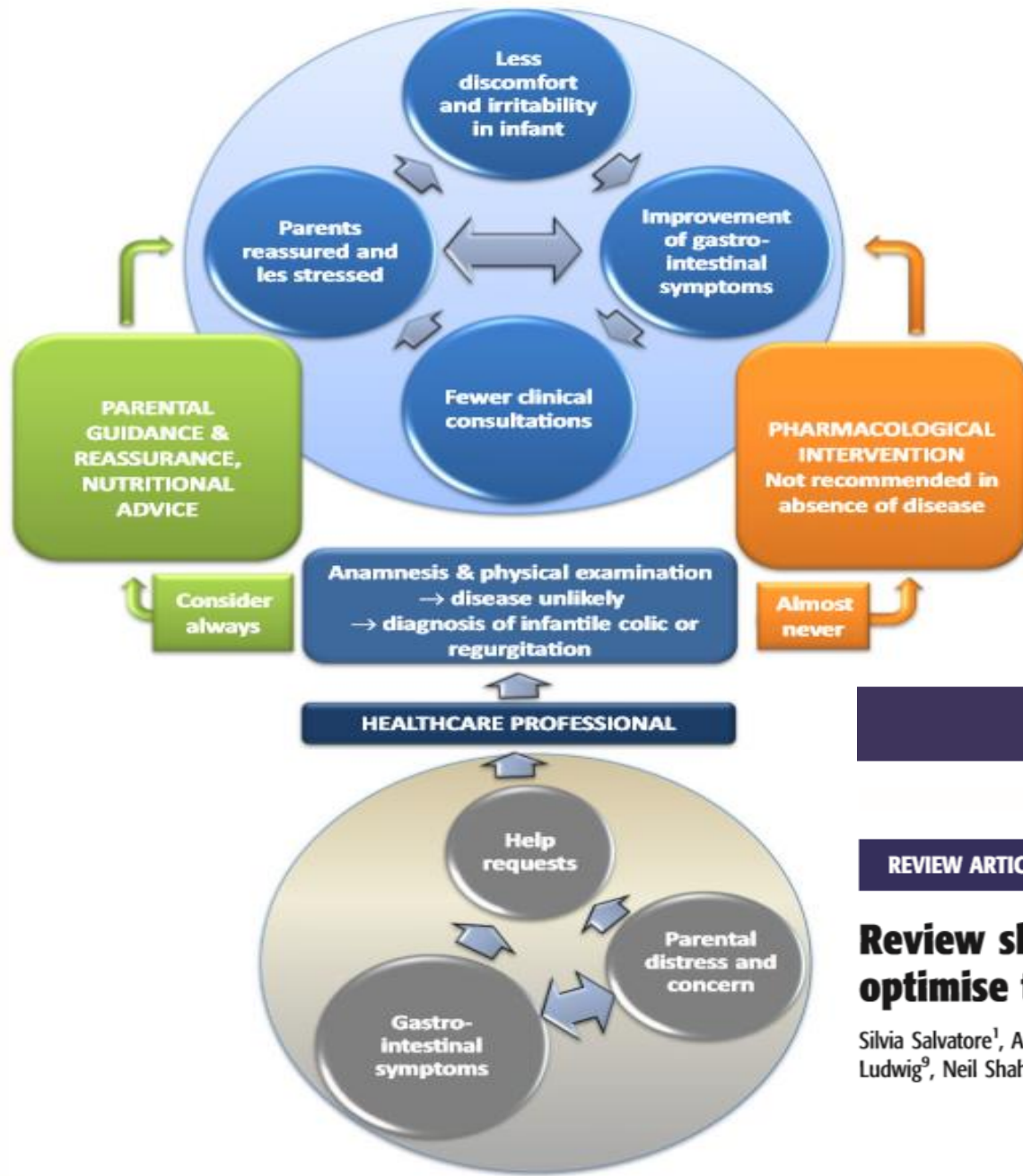
Vous avez bu ?

Oui

Non

X

Non



REVIEW ARTICLE

Review shows that parental reassurance and nutritional advice help to optimise the management of functional gastrointestinal disorders in infants

Silvia Salvatore¹, Abdelhak Abkari², Wei Cai³, Anthony Catto-Smith⁴, Sylvia Cruchet⁵, Frederic Gottrand⁶, Badriul Hegar⁷, Carlos Lifschitz⁸, Thomas Ludwig⁹, Neil Shah¹⁰, Annamaria Staiano¹¹, Hania Szajewska¹², Suporn Treepongkaruna¹³, Yvan Vandenplas (Yvan.Vandenplas@uzbrussel.be)¹⁴ 

Guidance parentale

- Réaccordage maternel
- Mère débordée vs contenante



Inconfort

Anxiété parentale



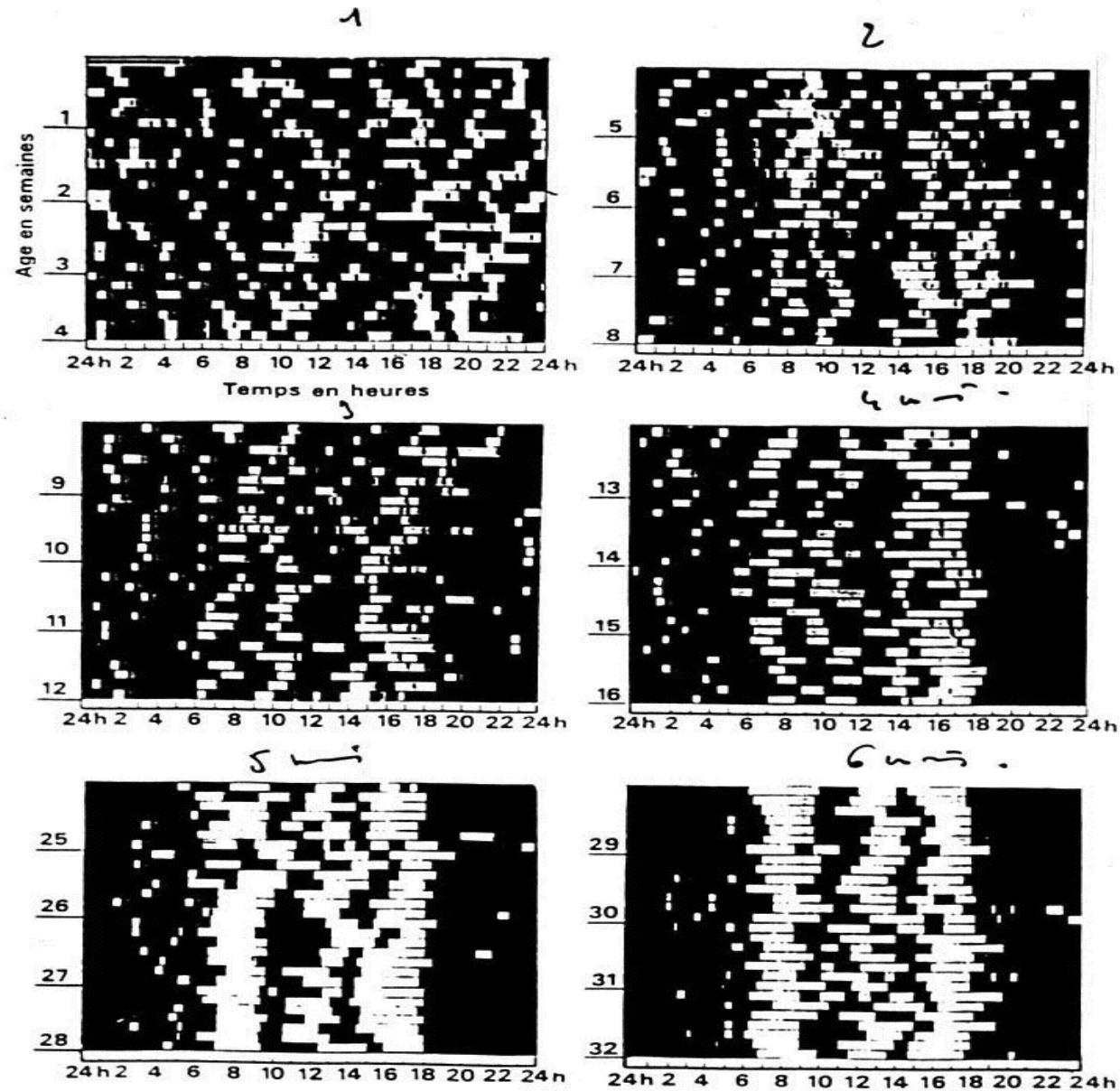


FIG. 1. — Diagrammes représentant les phases de veille calme (en blanc), de veille avec cris (blanc - Σ) et de sommeil (en noir), et leur transformation entre le premier jour de vie et 32 semaines : on assiste à l'organisation progressive du rythme nyctéméral (figure tirée de Parmelee, 1961).



Pleurs et inconfort du nourrisson : développement d'une échelle d'évaluation standardisée (ColIQ*)

ColIQ* (COLic Infants Questionnaire)

M. Bellaïche, A. Bocquet, K. Benmedjahed, M.
Arnould, C. Jung, V. Leblanc, S. Penvern-Cortes, B.
Tugaut, B. Arnould



ColiQ®





Un questionnaire exhaustif et simple à utiliser

ColiQ a été conçu pour analyser tous les aspects des coliques du nourrisson :

26

Questions

sur la documentation
des signes cliniques
(sévérité des troubles)

35

Questions

sur la qualité de vie
de l'entourage familial
(vie quotidienne, état
général des parents)

8

minutes

suffisent pour remplir
l'intégralité
du questionnaire



L'historique est consultable à tout moment par les parents et les professionnels de la santé concernés.

Chaque résultat peut être exporté ou imprimé afin de servir de support d'accompagnement en consultation.

Bonjour Véronique,

COL iQ
Colic Infants Questionnaire

Mes questionnaires
Mon profil & mes enfants
Aide
Se déconnecter

EMMA ZOÉ MARCEAU

Déjà 8 jours depuis le dernier questionnaire d'Emma
Vous pouvez dès à présent répondre à nouveau au questionnaire ! [RÉPONDRE À NOUVEAU](#)

Il y a 2 jours	Non terminé	REPRENDRE
Lundi 4 octobre 2017		
Il y a 5 jours	Score enfant 23/100 Score parent 14/100	CONSULTER
Mardi 30 octobre 2017		
Il y a 25 jours	Score enfant 66/100 Score parent 55/100	CONSULTER
Jeudi 5 octobre 2017		
Il y a 36 jours	Score enfant 82/100 Score parent 72/100	CONSULTER
Lundi 29 septembre 2017		

L'évolution de vos scores

Score enfant (pink line), Score parent (black line)

29/09 05/10 30/10 04/10

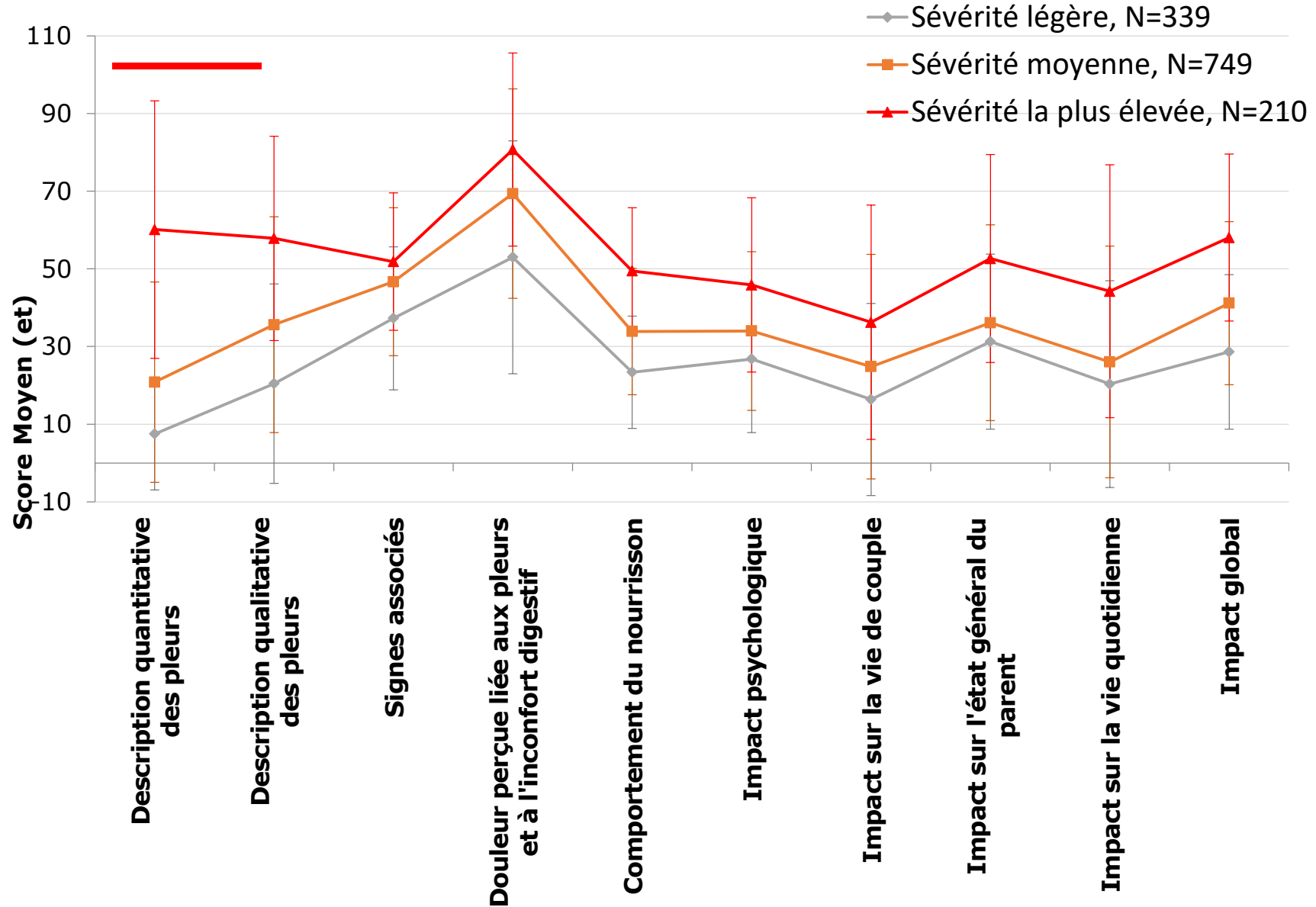
32/100

Besoin d'aide ?

Vous ne trouvez pas la réponse à votre question ? [CONSULTEZ LA FAQ](#)

Une question, un problème ? [CONTACTEZ-VOUS](#)

Profil de sévérité des nourrissons







ABSTRACT

Background

Infantile colic is a common disorder in the first months of life, affecting somewhere between 4% and 28% of infants worldwide, depending on geography and definitions used. Although it is self limiting and resolves by four months of age, colic is perceived by parents as a problem that requires action. Pain-relieving agents, such as drugs, sugars and herbal remedies, have been suggested as interventions to reduce crying episodes and severity of symptoms.

Objectives

To assess the effectiveness and safety of pain-relieving agents for reducing colic in infants younger than four months of age.

Search methods

We searched the following databases in March 2015 and again in May 2016: CENTRAL, Ovid MEDLINE, Embase and PsycINFO, along with 11 other databases. We also searched two trial registers, four thesis repositories and the reference lists of relevant studies to identify unpublished and ongoing studies.

Selection criteria

We included randomised controlled trials (RCTs) and quasi-RCTs evaluating the effects of pain-relieving agents given to infants with colic.

Data collection and analysis

We used the standard methodological procedures of The Cochrane Collaboration.

Main results

We included 18 RCTs involving 1014 infants. All studies were small and at high risk of bias, often presenting major shortcomings across multiple design factors (e.g. selection, performance, attrition, lack of washout period).

Three studies compared simethicone with placebo, and one with *Mentha piperita*; four studies compared herbal agents with placebo; two compared sucrose or glucose with placebo; five compared dicyclomine with placebo; and two compared cimetropium - one against placebo and the other at two different dosages. One multiple-arm study compared sucrose and herbal tea versus no treatment.

Table 5 Excerpt of current recommendations for the management of infantile colic

Recommendation

Reference

Parental education and reassurance as the first line of management

- Provide information on:
 - Signs of hunger and fatigue
 - Family structure and regularity
 - The self-limiting nature of the condition
- There is insufficient evidence to recommend swaddling and other caregiving interventions in all infants
- Evidence too limited to recommend herbal products such as fennel and peppermint
- Reassure parent that:
 - Infantile colic is usually a transitory phase
 - Soothing strategies such as holding the baby through the crying episode may be helpful
- Encourage parent to:
 - Look after their own well-being, ensuring access of support network
 - Continue breastfeeding where possible

- Expert group review (22)

- NICE, 2017 (55)

Nutritional management

- Besides parental education and reassurance, nutritional management of infant colic should be the first choice
- In selected breastfed infants with excessive irritability and crying, lactating mothers may be advised to exclude dairy products for 2–4 weeks and then reintroduce them
- For selected formula-fed infants, the use of extensively hydrolysed infant formula may help
- If cow's milk protein allergy is not a potential cause, partially hydrolysed formula with lactose-reduced or lactose-free and containing prebiotics or probiotics may contribute to a reduction in crying time
- One double-blind, placebo-controlled trial showed a significant decrease in infantile colic within 1 week of intervention with a partial hydrolysate, with high beta-palmitate and a specific prebiotic mixture of galacto- and fructo-oligosaccharides
- In selected breastfed infants, *L. reuteri* DSM 17938 may decrease infantile colic although there is insufficient data to recommend *L. reuteri* DSM 17938 in all colicky infants

- Expert group review (22)

Pharmacological therapy

- Pharmacological therapy (e.g. proton pump inhibitors, simethicone) is not effective, and may cause serious adverse reactions

- Expert group review (22)

ACTA PÆDIATRICA
[NURTURING THE CHILD]

Acta Paediatrica ISSN 0803-5253

REVIEW ARTICLE

Review shows that parental reassurance and nutritional advice help to optimise the management of functional gastrointestinal disorders in infants

Silvia Salvatore¹, Abdelhak Abkari², Wei Cai³, Anthony Catto-Smith⁴, Sylvia Cruchet⁵, Frederic Gottrand⁶, Badriul Hegar⁷, Carlos Lifschitz⁸, Thomas Ludwig⁹, Neil Shah¹⁰, Annamaria Staiano¹¹, Hania Szajewska¹², Suporn Treepongkaruna¹³, Yvan Vandenplas (Yvan.Vandenplas@uzbrussel.be)¹⁴ 

REVIEWS

Infant colic: mechanisms and management

Judith Zeevenhooven^{1*}, Pamela D. Browne^{1,2,3}, Monique P. L'Hoir⁴, Carolina de Weerth² and Marc A. Benninga¹

F1000Research

F1000Research 2018, 7(F1000 Faculty Rev):1426 Last updated: 07 SEP 2018



REVIEW

Recent advances in understanding and managing infantile colic [version 1; referees: 2 approved]

Siel Daelemans, Linde Peeters, Bruno Hauser, Yvan Vandenplas 

KidZ Health Castle, UZ Brussel, Vrije Universiteit Brussel, Brussel, Belgium

Indrio F et al Preventing and Treating Colic Adv Exp
Med Biol 2019 Jan 18. doi: 10.1007/5584_2018_315

Fiches de Recommandations
ou d'Informations.



COLIQUES DU NOURRISSON

Marc Bellaïche (Paris)
et l'ensemble du Conseil d'Administration du GFHGNP.

Infant colic: mechanisms and management

Judith Zeevenhooven^{1*}, Pamela D. Browne^{1,2,3}, Monique P. L'Hoir⁴, Carolina de Weerth² and Marc A. Benninga¹

Herbal remedies	The use of herbal remedies in the form of fennel, chamomile, gripe water or vervain might have antispasmodic action and relieve colic symptoms ¹³⁸	<ul style="list-style-type: none"> • Three RCTs supported the use of herbal remedies as a complementary management strategy for infant colic <ul style="list-style-type: none"> - One study reported a greater reduction in crying time in infants treated with a phytotherapeutic agent containing fennel (ColiMil; Humana, Portugal) than in infants treated with placebo²⁵² - Two other RCTs demonstrated a possible benefit of fennel seed oil emulsion or herbal tea with chamomile, licorice, vervain, fennel and balm mint versus placebo in reducing the crying time in infants with colic^{253,254} • One SR (five included studies) somewhat supported the use of herbal remedies as a complementary management strategy for infant colic <ul style="list-style-type: none"> - Some evidence exists for the effectiveness of different fennel preparations²⁰¹. Results have to be interpreted carefully because of the limited number of studies and low study quality • One SR (five included studies) argued against the use of herbal remedies as a complementary management strategy for infant colic <ul style="list-style-type: none"> - Some evidence indicated that herbal agents might reduce crying time compared with placebo or no treatment. However, results should be interpreted with great caution, as the quality of the evidence is very poor and the magnitude of the benefit is variable. Therefore, treatment with herbal remedies cannot be recommended²⁰⁰ - The use of herbal products is not standardized, and the benefits do not outweigh the potential risks of the use of these products, such as contamination with bacteria or toxins^{255,256}
Acupuncture	Acupuncture might attenuate symptoms of infant colic because of its inhibiting effect on somatic and visceral pain ²⁵⁷ and its effect on the autonomic nervous system ²⁵⁸	<ul style="list-style-type: none"> • Two RCTs supported the use of acupuncture as a complementary management strategy for infant colic <ul style="list-style-type: none"> - Minimal acupuncture on one point in the hand of infants with colic reduced crying intensity and duration compared with the control group (standard care without needling)²⁰² - A single-blind randomized study of infants with colic compared two styles of acupuncture with no acupuncture and found a greater reduction in the amount of crying in both acupuncture groups than in the control group²⁰³ • One RCT argued against the use of acupuncture as a complementary management strategy for infant colic <ul style="list-style-type: none"> - This study failed to show a difference in crying time reduction between the acupuncture and the control group²⁵⁹ - Acupuncture might be an effective and safe treatment option for infant colic, but further research is needed to optimize the needling location and stimulation^{201,260}
Manipulative therapies	Manipulative therapies might alleviate biomechanical distress that originates during the birth process, which might have led to colicky symptoms by cranial moulding or cervical dysfunction ²⁰⁴	<ul style="list-style-type: none"> • One SR (six included studies) argue against the use of manipulative therapies as a complementary management strategy for infant colic <ul style="list-style-type: none"> - It stated that it is impossible to achieve a definitive conclusion about the efficacy of manipulative therapies for infant colic owing to methodological shortcomings, especially performance bias, despite a greater proportion of parents reporting fewer hours crying per day than parents whose infants did not receive the therapy²⁰⁴
Reflexology	The mechanism underlying reflexology is unknown, but many believe that the effect is caused by an improvement of blood flow that encourages relaxation	<ul style="list-style-type: none"> • One RCT somewhat supported the use of reflexology as a complementary management strategy for infant colic <ul style="list-style-type: none"> - One study comparing specific and nonspecific reflexology with observation only found a better effect in the reflexology groups than in the observation only group. No difference between the two reflexology groups was found²⁰⁵. Methodological quality was low • Definitive conclusions about the effectiveness of reflexology are precluded because evidence is scarce and the methodology is impaired

Cochrane Database Syst
 Rev 2018 Oct 10;10:CD011029.
 doi:
 10.1002/14651858.CD011029.
 pub2.
 Dietary modifications
 for infantile colic.
 Gordon M^{et al}

Infant colic: mechanisms and management

Judith Zeevenhooven^{1*}, Pamela D. Browne^{1,2,3}, Monique P. L'Hoir⁴, Carolina de Weerth² and Marc A. Benninga¹

Gastrointestinal factor	Possible mechanisms	Evidence
CMPI	Allergic reaction: cow's milk protein is one of the first foods an infant is exposed to after birth. Allergic reactions following the introduction of this protein are suggested as a cause of infant colic ¹⁵⁶	<ul style="list-style-type: none"> • Three studies support the contribution of CMPI <ul style="list-style-type: none"> - Elimination of cow's milk protein in maternal diet improved symptoms in one-third of breastfed infants with colic¹¹⁰ - There was symptom resolution in infants with colic after switching from a cow's-milk protein-based formula to soy protein-based formula¹⁶⁸ - There was a benefit of whey hydrolysate formula over standard formula for reduced crying duration in infants with colic¹¹¹ • One systematic review supports the contribution of CMPI <ul style="list-style-type: none"> - Breastfed infants: hypoallergenic maternal diet might be beneficial in decreasing colicky symptoms¹¹² - Formula-fed infants: hydrolysate formula might ameliorate symptoms in infants with colic¹¹² • One study argues against the contribution of CMPI <ul style="list-style-type: none"> - There was only a temporary improvement in the duration of crying after casein hydrolysate formula instead of a cow's milk-containing formula; this effect diminished with time and was not reproducible¹⁶³
Excessive intestinal gas	Bacterial fermentation: incomplete absorption of carbohydrates in the small intestine results in bacterial fermentation, which might be related to intestinal immaturity ¹¹³	<ul style="list-style-type: none"> • Two studies support the contribution of excessive intestinal gas <ul style="list-style-type: none"> - There is increased breath hydrogen in infants with colic compared with infants without colic, suggesting differences in colonic bacterial fermentation^{114,228} • One study argues against the contribution of excessive intestinal gas <ul style="list-style-type: none"> - No differences in breath hydrogen excretion were seen between infants with or without colic²²⁹
Lactose intolerance	<ul style="list-style-type: none"> • Ingesting carbohydrates during the day leads to prolonged crying and abdominal pain, and crying peaks in late afternoon • Physiological malabsorption due to enzyme insufficiency, which has a tendency to resolve by the age of 3 months because of the increased gut lactase enzyme expression. This period coincides with the age that infant colic usually resolves^{230,231} 	<ul style="list-style-type: none"> • Two studies support the contribution of lactose intolerance <ul style="list-style-type: none"> - Infants with colic produced more breath hydrogen after intake of feedings containing lactose than infants without colic¹¹⁴ - There was a minor improvement of symptoms in infants with colic after treatment with pre-incubated feeds with lactase²³² • Two studies argue against the contribution of lactose intolerance <ul style="list-style-type: none"> - There was no symptom improvement after lactase supplementation in breastfed or formula-fed infants with colic^{233,234}
GER(D)	GER(D) has a relationship with infant colic because of overlapping symptoms in both entities, such as crying, irritability and restlessness ²³⁵	<ul style="list-style-type: none"> • One study supports the contribution of GER <ul style="list-style-type: none"> - 16/26 infants with colic were found to have 'pathological GER' (on the basis of an oesophageal pH <4) after pH monitoring during infant colic attacks²³⁶ • Six studies argue against the contribution of GER <ul style="list-style-type: none"> - Only 1/24 excessively crying infants younger than 3 months of age with presumptive GER had pathological GER on the basis of pH-monitoring results²³⁷ - Treatment with anti-reflux medication in irritable and crying infants was not superior to placebo and did not reduce crying^{238,239} - No correlation was found between duration of crying and fussing per day and the number of reflux episodes²⁴⁰ - In sum, the evidence of a cause-effect relationship between GER(D) and infant colic is weak, and it seems unlikely that GER has a causative role in colic^{241,242}

TFI chez les nourrissons

Une prévalence importante et des troubles souvent associés

Etude prospective italienne
chez **2 869** nourrissons de moins de 6 mois
vus de façon consécutive
en consultation pédiatrique (1)

54,9 % de nourrissons souffrant d'au moins 1 TFGI,
le plus souvent de régurgitations (23,1 %),
de coliques (20,5 %)
et/ou de constipation (17,6%)

Parmi lesquels 39,9 % souffrant d'au moins 2 troubles

Etude prospective française
chez **2 757** nourrissons de moins de 6 mois
nourris par une formule infantile (2)

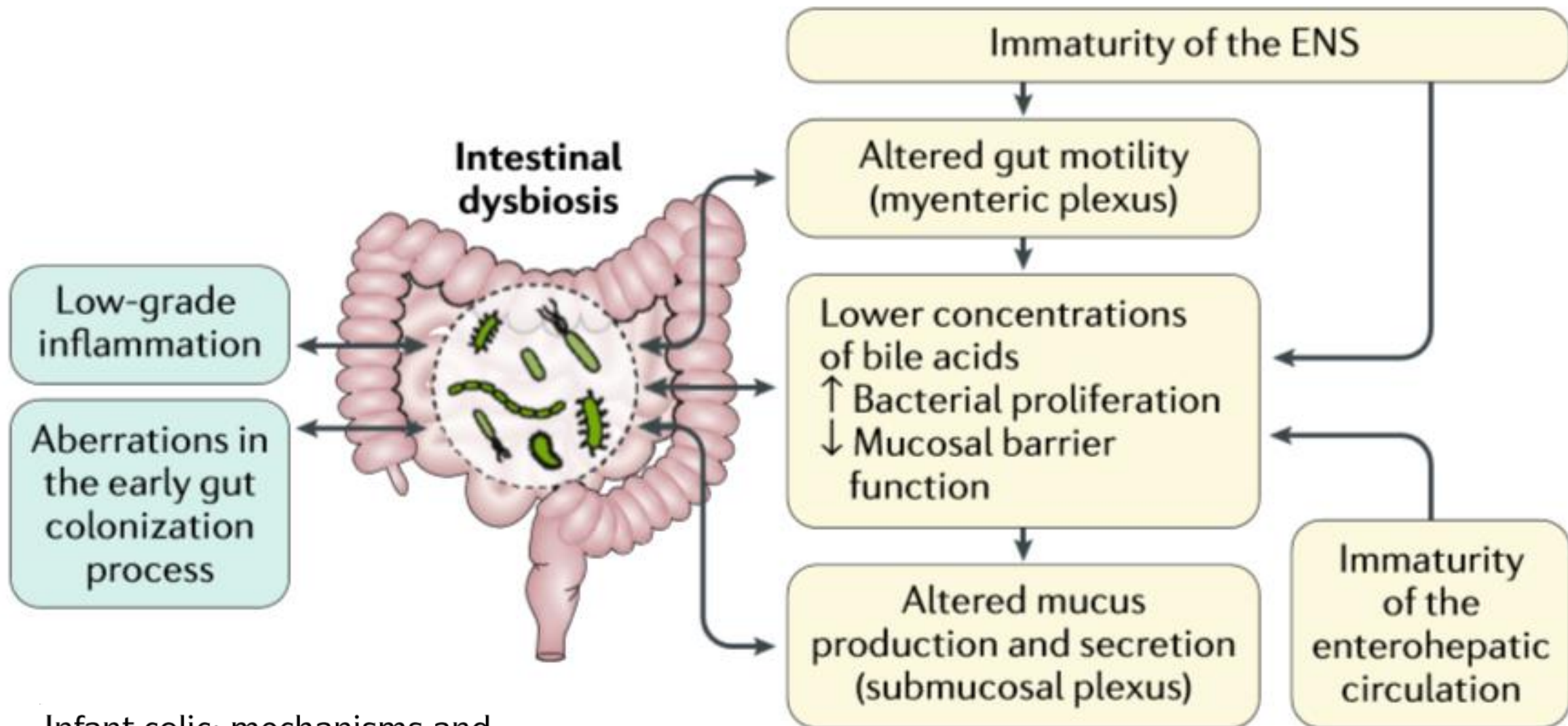
78 % de nourrissons souffrant de plusieurs TFGI,
dont **65 % de 2 troubles**
et **15 % de 3 troubles ou plus**

Associations les plus fréquentes :
Coliques et gaz/ballonnements : 28 %
Coliques et rejets : 17 %
Rejets et gaz/ballonnements : 8 %

1. Iacono G, Merolla R, D'Amico D et al. Gastrointestinal symptoms in infancy : a population-based prospective study. Dig Liver Dis 2005 ; 37 : 432-8.
2. Bellaiche M, Oozeer R, Gerardi-Temporel G, Faure C, Vandenplas Y. Multiple functional gastrointestinal disorders are frequent in formul-fed infants and decrease their quality of life. Acta Paediatr 2018 Mar 31. doi : 10.1111/apa.14348

Traiter TFI





Infant colic: mechanisms and management

Judith Zeevenhooven^{1*}, Pamela D. Browne^{1,2,3}, Monique P. L'Hoir⁴, Carolina de Weerth² and Marc A. Benninga¹

Journal of Pediatric Gastroenterology and Nutrition, 2015; 60(1): 1-10

Le probiotique « de référence » : *L reuteri* DSM17938 protectis

Lactobacillus reuteri to Treat
Infant Colic: A Meta-analysis
PEDIATRICS
OFFICIAL JOURNAL OF THE AMERICAN ACADEMY OF PEDIATRICS

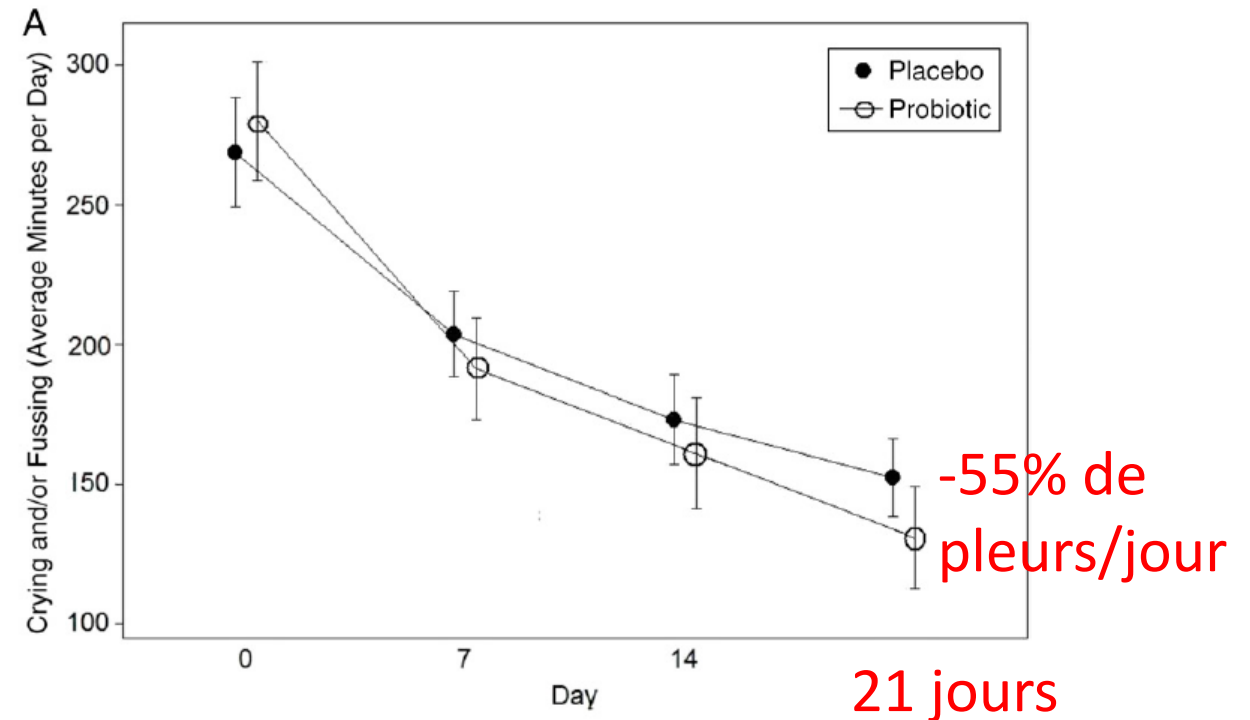
4 études, 345 bébés
(174 probiotiques et 171 placebo)

Effet chez ceux **allaités** mais
pas chez ceux au biberon

Sung, Pediatrics, 2018

Conclusion : *L reuteri* DSM17938 est efficace et peut être recommandé pour les bébés **allaités** avec coliques

25.4 minutes de pleurs en moins à **j21**
(de 3.5 à 47.3 min)



Colic treatment : network meta-analysis

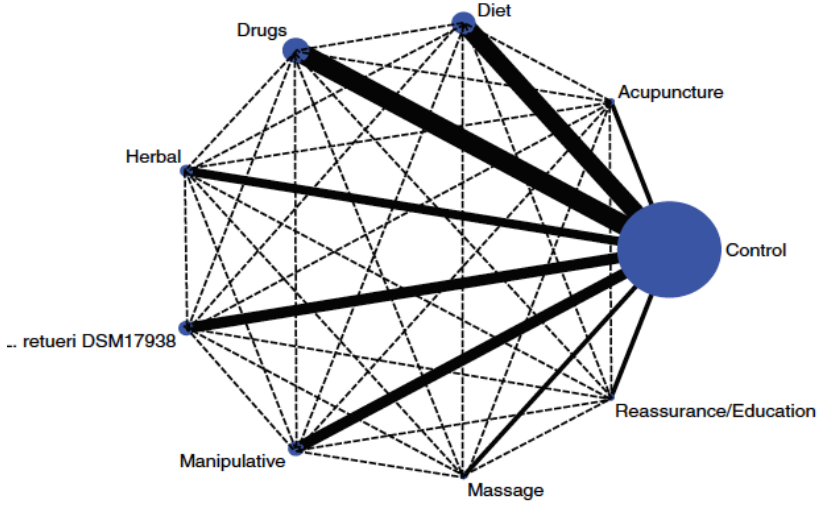


Figure 2. Network meta-analysis of multiple treatments for infantile colic.

Gutiérrez-Castrellón et al.
Medicine (2017)

Best Treatment Analysis

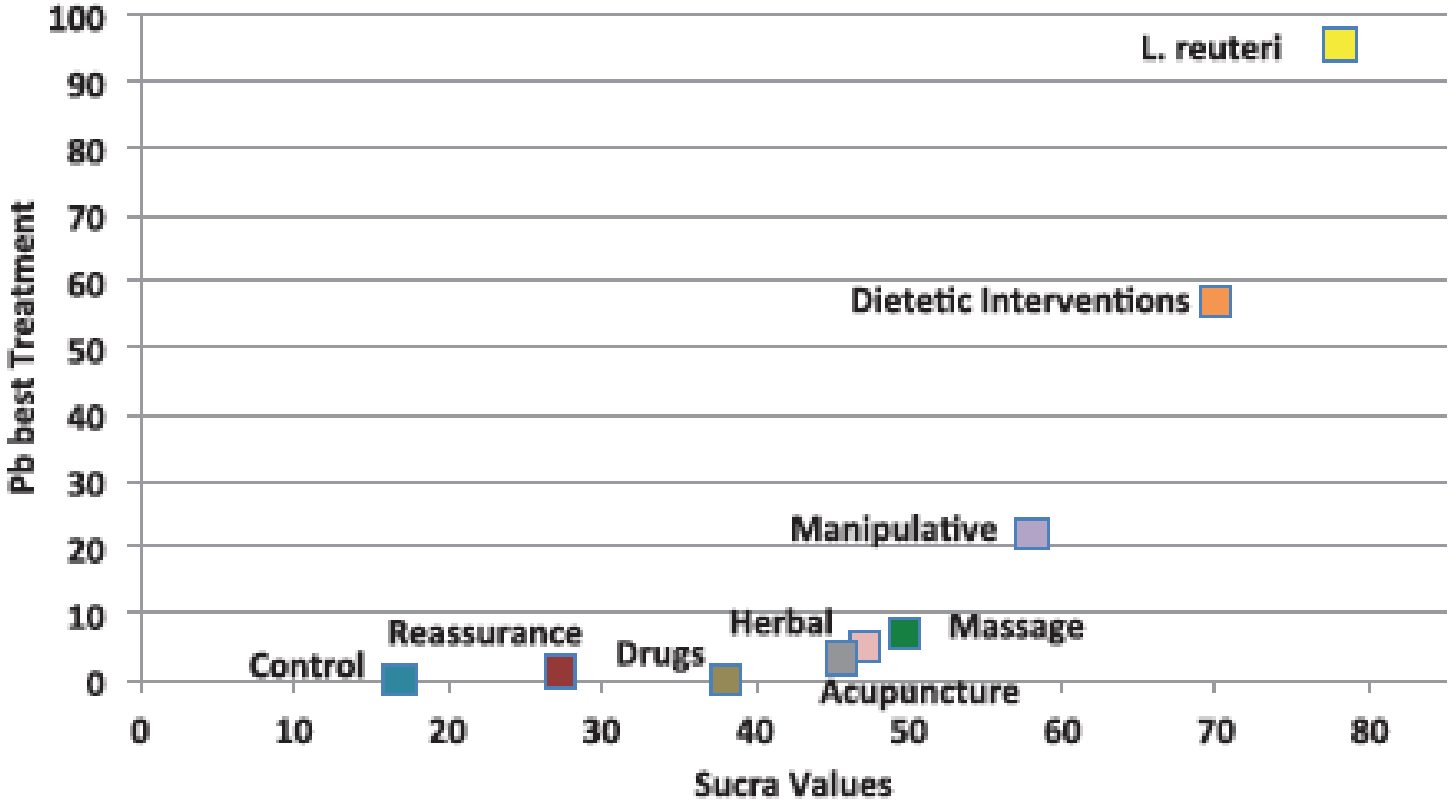


Figure 6. Ranking plot of multiple treatments for infantile colic.

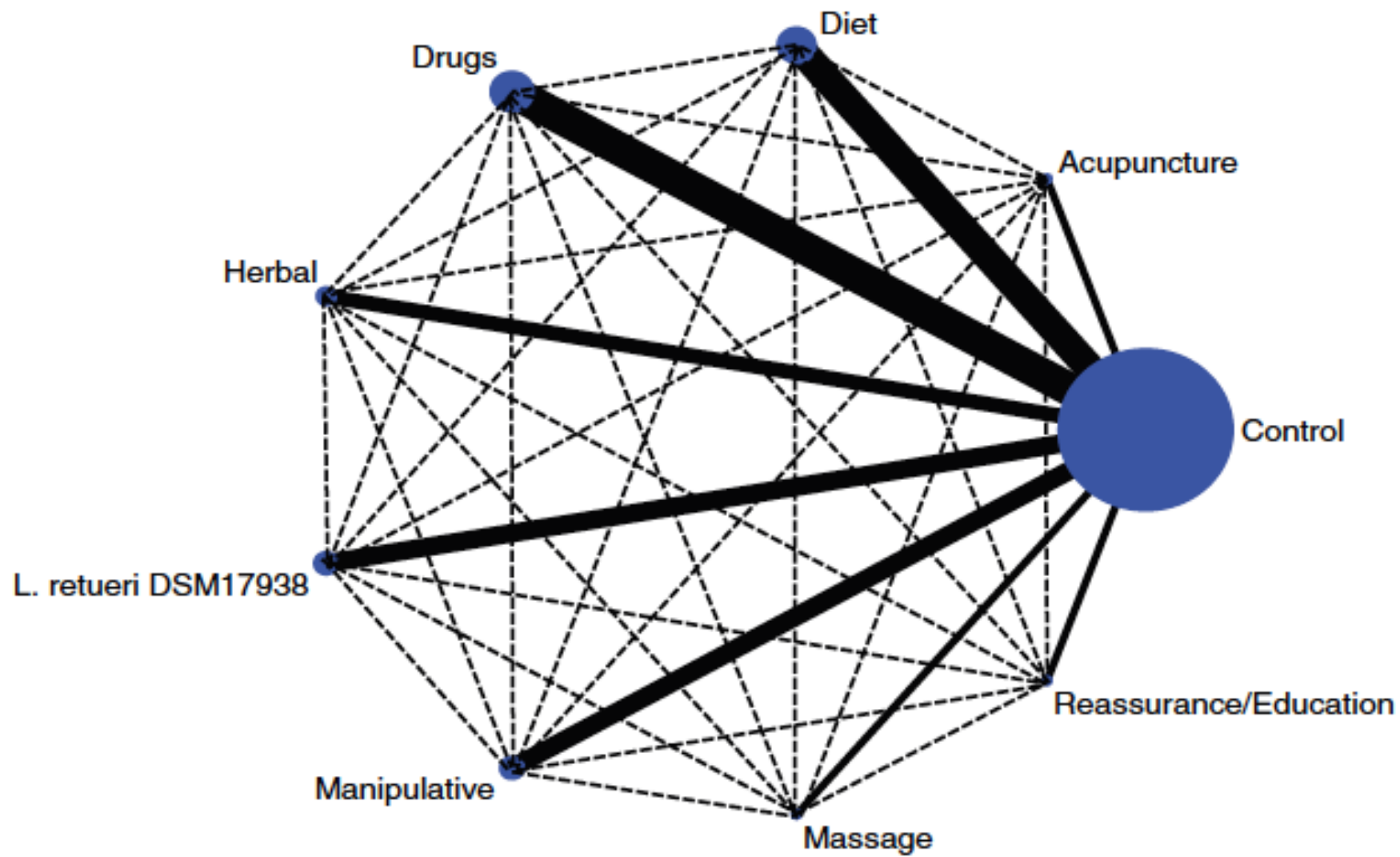


Figure 2. Network meta-analysis of multiple treatments for infantile colic.

Commercial Probiotic Products: A Call for Improved Quality Control. A Position Paper by the ESPGHAN Working Group for Probiotics and Prebiotics

**Sanja Kolaček, *Iva Hojsak, †Roberto Berni Canani, ‡Alfredo Guarino, §Flavia Indrio, ||Rok Orel, ¶Bruno Pot, #Raanan Shamir, **Hania Szajewska, ††Yvan Vandenplas, ‡‡Johannes van Goudoever, and §§Zvi Weizman, ESPGHAN Working Group for Probiotics and Prebiotics*

- Our review provides evidence on the inadequate quality of commercial probiotic products, with regard to microorganism specification, their numbers, functional properties, and the presence of contaminating microorganisms.



REPÈRE

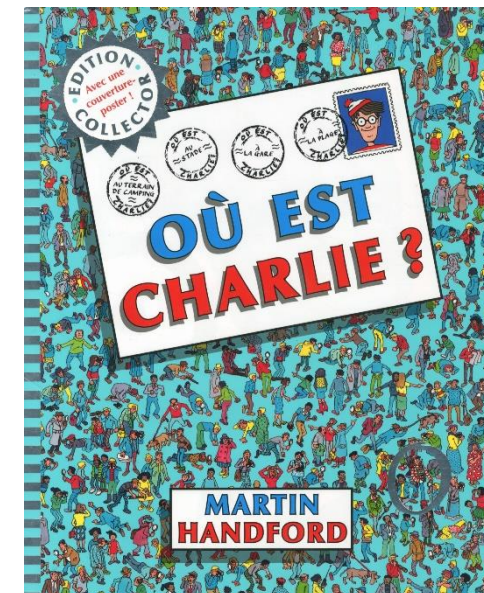
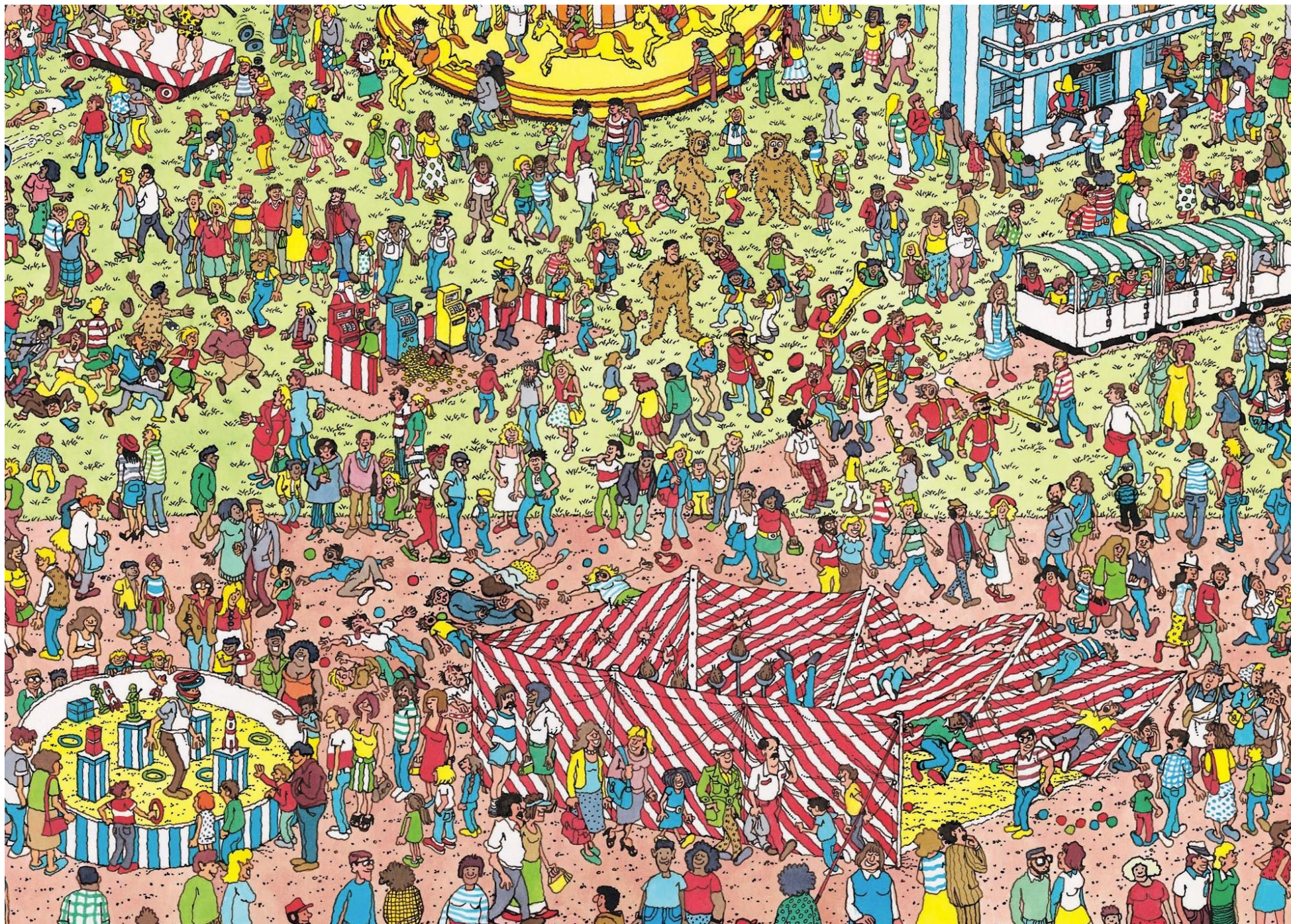


Souches: Ex
Lactobacillus acidophilus
LA201

REPÈRE



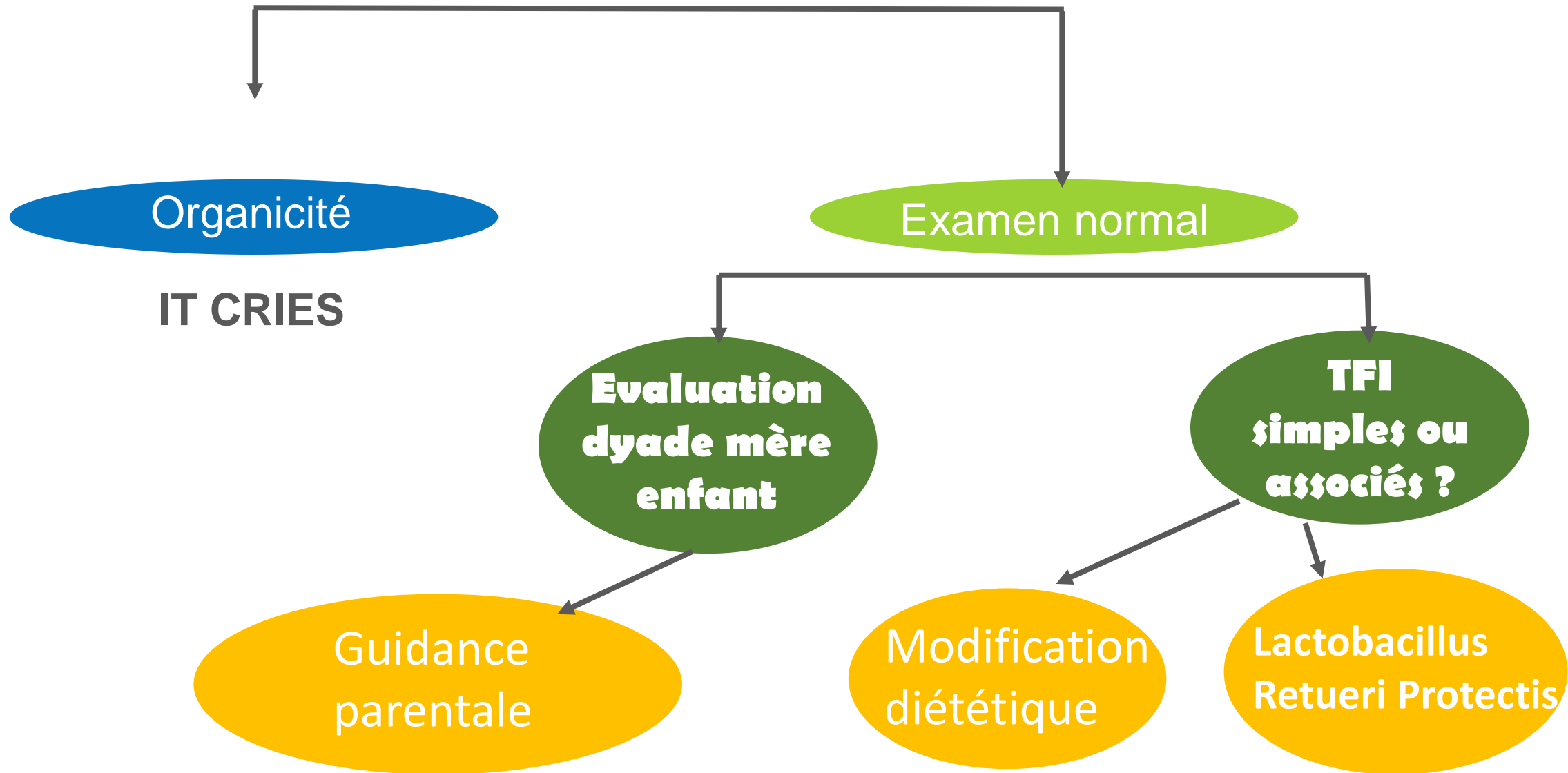
Souches: Ex
Lactobacillus Reuteri
DSM17938
protectis



Exprimer sa différence ...

- Fructo-oligosaccharides, *Lactobacillus casei*, *L. rhamnosus*, *Lactobacillus acidophilus*, *Lactobacillus bulgaricus*, *Streptococcus thermophilus*, *Bifidobacterium breve*, and *Bifidobacterium infantis*
 - Kianifar H, Ahanchian H, Grover Z, et al.: Synbiotic in the management of infantile colic: a randomised controlled trial. *J Paediatr Child Health*. 2014; 50(10): 801–5
- *Bifidobacterium breve* BR03 and B632
 - Giglione E et al *Bifidobacterium breve* BR03 and B632 is Effective to Prevent Colics in Bottle-fed Infants: A Pilot, Controlled, Randomized, and Double-Blind Study. *J Clin Gastroenterol*. 2016 Nov/Dec;50 Suppl 2
- Whey hydrolysate with reduced lactose, *Bifidobacterium lactis* BB12, and galacto-oligosaccharides
 - Xinias I, Analitis A, Mavroudi A, et al.: Innovative Dietary Intervention Answers to Baby Colic. *Pediatr Gastroenterol Hepatol Nutr*. 2017; 20(2): 100–6
- Tyndallized probiotics (xyloglucan) *L. reuteri* SGL01 100 × 10⁹ colony-forming units (CFU)/g and *B. breve* SGB01 100 × 10⁹ CFU/g
 - Vandenplas Y, Bacarea A, Marusteri M, et al.: Efficacy and safety of APT198K for the treatment of infantile colic: a pilot study. *J Comp Eff Res*. 2017; 6(2): 137–44.
- *Matricaria chamomilla*, *Melissa officinalis*, and tyndallized *L. acidophilus* (HA122) with *L. reuteri* DSM 17938
 - Martinelli M, Ummarino D, Giugliano FP, et al.: Efficacy of a standardized extract of *Matricariae chamomilla* L., *Melissa officinalis* L. and tyndallized *Lactobacillus acidophilus* (HA122) in infantile colic: An open randomized controlled trial. *Neurogastroenterol Motil*. 2017; 29(12): e13145.
- *L. paracasei* DSM 24733, *L. plantarum* DSM 24730, *L. acidophilus* DSM 24735, and *L. delbrueckii* subsp. *bulgaricus* DSM 24734), three strains of bifidobacteria (*B. longum* DSM 24736, *B. breve* DSM 24732, and *B. infantis* DSM 24737), and one strain of *Streptococcus thermophilus* DSM 2473
 - Baldassare et al *Nutrients* 2018, 10, 195; doi:10.3390/nu10020195

Take Home messages : bébé inconfortable



Plus qu'un Congrès : Un Concept !
Pour tous les Médecins de l'enfant



Jeudi 12 Décembre 2019

Sous l'égide du
Groupe Francophone
d'Hépatologie-Gastroentérologie
et Nutrition Pédiatrique
Validant DPC

5^{ème} ECHANGE

E change de
C onsensus
H ôpital
A mbulatoire en
N utrition
G astroentérologie
hÉ patologie

Validation DPC :
Inscription :
A.F.P.A.

ECHANGES EN HEPATO-GASTROENTEROLOGIE ET NUTRITION PEDIATRIQUE

UNE QUESTION ... UN AVIS D'EXPERTS A DEBATTRE ...

SIMPLE COMME UNE CONVERSATION

Pavillon IMAGINE 24 Bd du Montparnasse - PARIS

Coordination Scientifique : Marc Bellaïche, Emmanuel Mas,

Stéphanie Willot et l'ensemble du CA du GFHGNP

Inscriptions : 120€ sur le site du GFHGNP, Etudiants : demi-tarif : <http://www.gfhgnp.org>

Contact : developpeur.gfhgnp@gmail.com



E.C.H.A.N.G.E

Echange de Consensus
Hôpital, Ambulatoire en
Nutrition
Gastroentérologie et
Hépatologie

ECHANGE 2019

Institut IMAGINE, 24 Bd du Montparnasse, PARIS 6eme

DPC : Diagnostic à fleur de peau

« Quand la peau oriente vers une maladie digestive »

9h30-12h30 :

- ✓ Maladies systémiques digestives et Peau - *Alice Phan*
- ✓ Peau et carences nutritionnelles – *Noel Peretti*
- ✓ Allergies alimentaires et Peau - *Nicolas Kalach*
- ✓ Obésité et Peau – *Emmanuel Mahé*
- ✓ Anus en Peau – *Marc Bellaïche*

12h30 – 13h30 Déjeuner

ECHANGE 2019

13h30- 17h30 :

Hépatologie

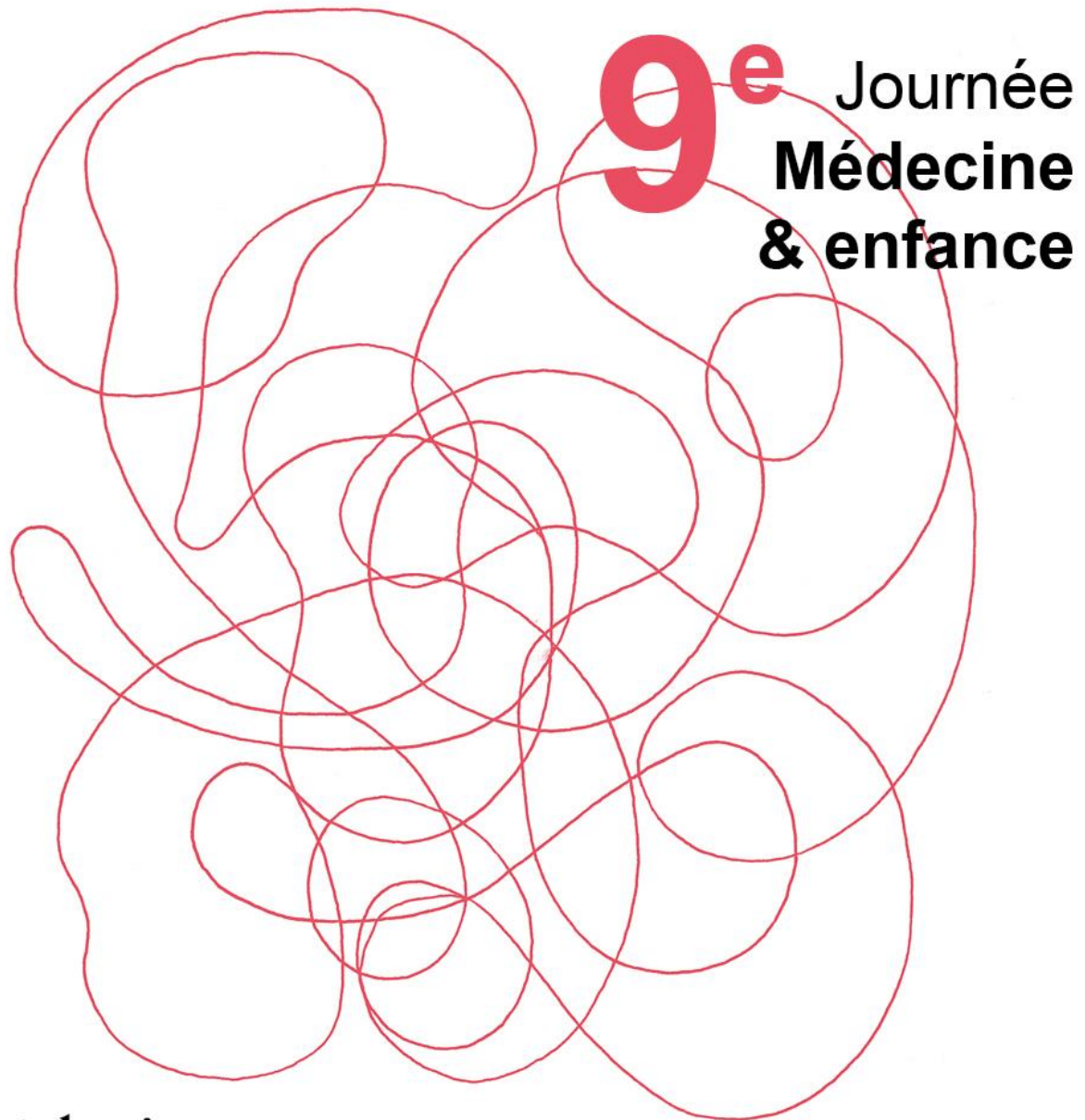
- 👉 Biologie hépatique : Pièges d'interprétations - *Xavier Stephenne*
- 👉 Les Toxiques Hépatiques - *Thierry Lamireau*

Gastroentérologie

- 👉 Maladie Coeliaque et Diabète de Type I – *Alexandre Fabre*
- 👉 Ingestions accidentelles: Comment réagir. – *Sophie Heissat*
- 👉 Probiotiques disponibles en France, comment faire son choix ? - *Alexis Mosca*

Nutrition

- 👉 Bilan initial d'un retard pondéral – *Noel Peretti*
- 👉 Compléments Nutritionnels Oraux, Utiles ou Inutiles – *Emmanuelle Dugelay*
- 👉 Prises en charges des problèmes courant des Gastrostomies - *Laurent Michaud*



9^e Journée Médecine & enfance

MG

Samedi

18 JANVIER 2020

Maison de la Chimie, 75007 Paris

Journée organisée par

la Société Française de Médecine Générale (SFMG),
l'Association Clinique et Thérapeutique
Infantile du Val-de-Marne (ACTIV)
et la revue Médecine & Enfance

Sous la présidence de Marc Bellaïche

Direction scientifique :

Benjamin Azemar, Marc Bellaïche,
Philippe Boisnault, Marine de Chefdebien,
Robert Cohen, Robert Toutou

Médecine
& enfance



ACTIV

A votre disposition

marc.bellaiche@aphp.fr

