L. REUTERI
FOSTERING THE PROBIOTIC SCIENCE FOR GUT COMFORT AND GROWTH
MAY 4th – 5th, 2018 | DIVANI CARAVEL | ATHENS, GREECE
# Workshops by The Union Arab of Pediatric Societies

In collaboration with the first Department of Pediatrics, Medical School, University of Athens at the Aghia Sophia General Children’s Hospital

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**INFORMATION FOR MEDICAL PROFESSION ONLY**
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Prof. Joseph Haddad is Professor of Pediatrics and Neonatology at Saint George University Hospital in Beirut. He has undertaken research on the cholinergic system in Sudden Infant Death Syndrome, cerebral blood flow in the newborn, imaging of the brain in the neonate, and the perinatal origin of adult diseases. He has published over 70 research papers, and has chaired seminars, congresses, and symposia.

Prof. Haddad is President of the Union of Arab Pediatric Societies, and is Director of Research and Development for Sesobel (an NGO for disabled children). He also serves as a consultant for both UNICEF and the WHO.
ABSTRACT

FGIDs: Infantile Colic
A Clinical Case Discussion

Definition
Infantile colic is when an otherwise healthy infant is crying for an excessively long time. The classic Wessel definition defines infantile colic as: When an otherwise healthy infant cries for:

- >3 hours a day for >3 days a week for >3 weeks
- It resolves by 3 months of age
- Colic starts at two weeks of age and lasts till 3 months
- In premature babies, it starts two weeks after the due date
- Incidence: 2% to 12%

Infantile colic is a common condition
- Can occur in up to 40% of babies
- Common in both breastfed and bottle-fed babies
- Usually starts in the first few weeks of life
- A driver for up to 25% of pediatric consultations

Infantile colic is often accompanied by secondary symptoms:
Distended abdomen, flexed legs, clenched fists, abdominal cramps, regurgitation, flatulence, painful facial expression, arching back, flushing and constipation. Crying peaks between 6:00 pm and 12:00 pm.

Disturbed sleep patterns in colicky infants may lead to disturbed sleep for the entire family. Colic in early infancy may be associated with recurrent abdominal pain later in childhood.

Diagnosis of colic
- Colic is a diagnosis of exclusion
- We need to obtain a detailed history of when and how long the baby cries
- The development of infantile colic may be multifactorial

Symptoms & signs that suggest a diagnosis other than colic
- Failure to thrive
- Irritability that is almost continuous, rather than episodic
- Irritability that lasts beyond 3 or 4 months
- Vomiting, diarrhea, constipation
- Heme positive stool
- Rash
- Respiratory symptoms
- Point tenderness in an extremity
- Anal fissures

The four theories of colic
1- GI disorders
2- Maternal anxiety
3- Difficult infant temperament
4- Brain immaturity

L. reuteri has proven clinical benefits on gut comfort
- But how does it work?
- Crying time in colicky infants
- Regurgitation episodes in infant with functional regurgitation
- Number of stools in infants with functional constipation
Dr. Tawfiq Hen is a consultant in General Pediatrics at Sheikh Khalifa Medical City, managed by Cleveland Clinic, Abu Dhabi. He has 20 years of experience in the medical field. He has a special interest in allergy and asthma. In addition, Dr. Hen is interested in pediatric nutrition and currently runs the Feeding Clinic at SKMC, which mainly addresses children with feeding behavioral disorders and failure to thrive. His clinical experience is also focused on the management of children with Down syndrome.

Dr. Hen is an active member of the Clinical Teaching Unit and in recognition of his contribution he was twice the recipient of the Best Teacher Award.
ABSTRACT

L. reuteri Revisited

Probiotic products that may modify the intestinal microbiota are becoming increasingly available and known to consumers due to their potential to prevent or treat many pediatric health conditions. As scientific knowledge of the health benefits of probiotics increases, it is important to identify factors that may prevent their successful integration into patient care as well as to ensure effective translation of research findings. Therefore, developing and maintaining a healthy gut that is loaded with beneficial strains of bacteria is crucial to their overall health. The aim of this presentation is to show the effect of probiotics on the health of children and on their future health status. Since L. reuteri is one of the most studied and one of the most used strains as probiotic in infants, the talk will highlight the benefits of early introduction of L. reuteri in the nutrition of children.

Failure to Thrive

Failure to thrive is encountered in general practice and across all disciplines of pediatrics. It is most commonly diagnosed in children less than 2 years of age, but can also affect those older. There is no consensus regarding a definition, but is understood to reflect sub-optimal growth. The causes are often multifactorial with a wide spectrum of etiologies, including a combination of both organic and non-organic factors. Most cases are due to poor nutrition, but neglect as the sole cause or contributing factor should always be remembered. Common age-related etiologies are described and we aim to provide a practical approach to diagnosis.

The importance of taking a comprehensive history, elucidating relevant physical signs and proceeding to a logical method of relevant investigation is described. Treatment is dictated by the underlying pathology, but general therapeutic measures and a multidisciplinary team approach are vital in treatment. The prognosis will vary according to etiology, and is good in those with unintentional poor calorie intake who recover without any long-term physical or developmental problems.
Prof. Umran is the Consultant Pediatrician and Head of Paediatrics Department in College of Medicine, University of Kufa, Iraq. He received MBChB in 1994 from Baghdad College of Medicine and Board Certified in pediatrics since 2001. He is an International Member of AAP since 2006 and Associate Member of RCPCH since 2009. He had a clinical attachment in Cambridge University, UK and in University of South California, USA. He is a member of governing board of International Neonatology Association. He also participates and speaks in many local, regional and international conferences and has published many papers in neonatology and general pediatrics.
Infantile Colic: Latest Recommendations

Colic is defined as "excessive crying". An infant with colic usually cries for more than three hours per day on more than three days per week. Colic is extremely common and occurs in up to 40 percent of all infants. It usually starts sometime between the third and sixth week after birth and ends when a baby is three to four months of age.

The diagnosis of colic was reached after collection of the criteria and exclusion of other causes of colic such as hunger to more serious problems such as infection. The goals of treatment for colic are to decrease the infant’s crying. Several strategies were used to support families and treat colic such as: Parental support, take a break, dietary and feeding technique changes, carrying, change in environment, probiotics, infant massage and herbal remedies.

Probiotics are microorganisms that have beneficial properties for the host. Some studies suggest that a particular probiotic, Lactobacillus reuteri, may be helpful in children with colic.
Dr. Mohamed Salah graduated from the School of Medicine, Ain Shams University in 1993, where he started his medical practice as an Internal Medicine Specialist. In 1996, he received his Masters’ Degree in Gastro-Enterology & Hepatology from Ain-Shams University, he then worked as a GI specialist in Ahmed-Maher Hospital. Dr. Salah started his PhD studies on 1997 on HCV and management by IFN alpha, he was then appointed responsible for the Endoscopy Unit at the Institute of Topical Medicine, Cairo.

He joined the pharmaceutical site on 1998 at GSK as CRA, then as a medical manager and as a therapy area head in 2003. In 2001, he obtained an International Business Administration “MIBA” degree from Ecole Superieure Libre Des Sciences Commerciales Appliquees (ESLSCA), France. In 2003, he joined Bayer/Schering Pharma as the Regional Head of Oncology for the Middle East. Dr. Salah then joined Pfizer in 2011 as the AfME Director of the Medical, Compliance and R&D department. He is currently the Medical Director for Néstle Nutrition in the region MENA. He has 6 publications in the field of pediatrics and nutrition.
Background:
A number of scientific organisations have developed guidelines for the primary prevention of allergic disease through nutritional interventions. However, even if the best evidence-based guidelines are available, these guidelines do not necessarily lead to adherence and improved health outcomes.

Method:
To determine how closely the practice of physicians in select Middle Eastern and North African countries compares with the current recommendations on the primary prevention of allergy, a survey study was performed using a structured questionnaire and convenience sampling.

Results:
A total of 1481 physicians responded, of which 66.1% were pediatricians. A total of 76.6% of responding physicians routinely identify infants who are at risk for developing allergy. In infants at risk for developing allergy, 89.1% recommend exclusive breastfeeding for at least 4 months. In contrast to current recommendations, 51.6% routinely recommend avoidance of any allergenic food in the lactating mother. In infants at risk of developing allergy who are completely formula fed, standard infant formula was recommended by 22.5% of responders. Of the responding physicians, 50.6% would recommend delaying the introduction of complementary food in infants at risk of allergy compared to those not at risk, whereas 62.5% would recommend postponing the introduction of potentially allergenic foods. Only 6.6% stated they follow all current recommendations on food allergy prevention.

Conclusion:
The results of this survey suggest that a substantial part of responding physicians from select Middle Eastern and North African (MENA) countries do not follow current recommendations on primary prevention of allergic disease through nutritional interventions.