EUROPEAN PAEDIATRIC ASSOCIATION
(EPA / UNEPSA)

Newsletter

Clinical update:
Gastroesphageal reflux (GER) in infants

News from Europe:
The 6th Europaediatrics in Glasgow 2013

EPA Newsletter / Issue 15/ September 2012

Contents of EPA/UNEPSA Newsletter Issue 15

Cover page drawing: A classic European children's hospital - The Charité-Universitätsmedizin Berlin

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Letter of the Editor

Dear Colleagues and Friends,

After a summer leave that I suppose was fine and relaxing for everybody, we are back to our daily work concerning paediatric care. In the present issue, you will find a report about the progress of the 6th Europaediatrics (Glasgow, 5th-8th June 2013). The importance of the joint conference with the Royal College of Paediatrics and Child Health (RCPCH) should be added, and how the preparatory meetings for the scientific program forecast a big updated science reservoir from which one can take what is needed for practicing and clinical research. Please save the dates to profit from this input in the singular Scottish country.

The EPA is going to hold its habitual administrative meetings that will take place in Istanbul this October on the occasion of the biannual meeting of the European Academy of Pediatrics and with the well-proven hospitality of the Turkish Pediatric Association. New elections are scheduled for the general assembly.

Under the heading of Clinical Update, you may find concise information on simple gastroesophageal reflux (GER) and the clues for detection when it is evolving to disease status (GERD). Due to its high frequency, this can be helpful.

The EPA continues its tasks in Europe and beyond. The weaning questionnaire addressed to European paediatricians is going slowly, but I am confident that once the complex data are analyzed, we will be in a position to provide real information and consequent suggestions on a subject that affects every child on our continent. Beyond Europe, and together with the American Academy of Pediatrics, the EPA was present at the 50th anniversary of the Hong Kong Paediatric Society. These kinds of actions and relations are enriching and quite characteristic of our society, and they are well rooted in its core.

Manuel Moya
Editor of Newsletter
Vice President of EPA

P.S. If you wish to receive an e-alert for new issues, all you have to do is send an e-mail to ***epa-unepsa@2eic.com***

6th Europaediatrics jointly held with the RCPCH Annual Conference

5th-8th June 2013, Glasgow, United Kingdom

We are delighted to announce that the 6th Europaediatrics, the biennial Conference of the European Paediatric Association (EPA/UNEPSA), will be held jointly with the Royal College of Paediatrics and Child Health (RCPCH) Annual Conference. This is the first time we will be co-hosting an allied healthcare professional conference alongside Europaediatrics. The Paediatric Nursing Association of Europe (PNAE) annual conference will run in parallel from the 7th-8th June. Delegates will have access to all sessions taking place on the days they are registered to attend, making next year's conference an essential meeting for all paediatric healthcare professionals. Make sure you're part of the 2013 joint conference with an exciting programme which includes prestigious speakers, updates on key clinical issues, and the latest paediatric science.

We expect the 6th edition to become our best yet, building on the unequivocal success of the 5th Europaediatrics in Vienna in 2011. In 2013, we anticipate an attendance of over 3,000 delegates from 55+ countries. All attendees will benefit from having access to, not only the Europaediatrics conference, but also all parallel RCPCH sessions taking place. The timely scientific programme, including prestigious speakers from all over Europe, will bring delegates up-to-date with the latest developments in paediatrics, encompassing a plethora of topics that range from primary to secondary care. The programme consists of a strong combination of lectures, symposia, "meet-the-professor meetings" and personal practice sessions, all designed to keep you fullly informed of the latest developments. Additionally, a series of high-quality interactive courses will be offered for a hands-on approach on specific topics, providing you with applied practice-changing advice. In addition, Europeadiatrics is an outstanding place to connect with your peers and colleagues from member associations and societies from across Europe.

The 6th Europaediatrics will take place in the Scottish Exhibition and Conference Centre (SECC). The Scottish Exhibition and Conference Centre (SECC) is Scotland's premier national venue for public events, concerts and conferences. Glasgow is a lively city in the west of Scotland with a rich and vibrant culture and history. The city offers an excellent conference infrastructure and the highly professional services required to organise this joint event. In addition, the international airport has direct flights from over 100 destinations from across Europe and around the world. We feel certain that it provides the perfect setting for our biennial meeting. Make sure you block the dates in your diary now, and book your place, to be part of this unique joint conference.

Organised by the European Paediatric Association Council

President:	Professor Andreas Konstantopoulos, Greece
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	Professor Julije Mestrovic, Croatia
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President of the 6th Europaediatrics:	Professor Terence Stephenson, United Kingdom

Organised by the Scientific Committee

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	Professor Leyla Namazova-Baranova, Russia
	Doctor Antonio Nieto, Spain
	Professor Armido Rubino, Italy
	Professor Terence Stephenson, United Kingdom
	Doctor Alistair Thomson, United Kingdom

Further information: You can find out more online through the EPA, Europaediatrics, RCPCH and PNAE websites:

- **www.epa-unepsa.org**
- **www.europaediatrics2013.org**
- **www.rcpch.ac.uk/conference2013**
- **www.pnae-congress.org**

GASTROESOPHAGEAL REFLUX (GER): PRESENT APPROACH IN INFANTS

The first question that should be addressed is whether we are dealing with a case of gastroesophageal reflux or a gastroesophageal reflux disease (GERD); then definitions are the first point to deal with. According to MA Benninga (1), regurgitation (spitting up, bringing up, spilling up, GER,...) is an effortless return of small amounts of swallowed food during or shortly after eating. Within limits, this is a natural occurrence, especially in the first 4-6 months. Conversely, GERD is an involuntary, effortless passage of gastric content in the esophagus and/or ejected from the mouth with troublesome symptoms and/or complications. In typical cases, GER corresponds to the 'happy spitter', whereas GERD could be as severe as Barrett esophagus. But initially, there is an area of uncertainty in which the same symptoms appear. The idea of this clinical update is to give some clues for assessing which group the regurgitating kids younger than one year belong to.

For better management, two anatomical considerations should be made. The first is the stomach capacity (**Table 1**); if the GER infant is receiving food at greater volumes, regurgitations are a logical consequence. The second consideration is the esophagogastric junction. The lower esophageal sphincter (LES) and the crural diaphragm maintain a continuous tone that prevents the flow from the stomach to the esophagus. Reflux appearing as transient relaxations of the crural diaphragm probably occurs after a vago-vagal reflex. These transient relaxations have been measured in terms of number and duration (2).

At this point, it is possible to evaluate what leads GER to GERD: the number of reflux events, their duration, the acidity of the refluxate, non-acid refluxates, and esophageal susceptibility. These five circumstances are important due to the possibility of assessing almost all of them in a determined patient.

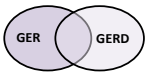
What are the clinical symptoms in the aforementioned area of uncertainty? This area between them, where the process could evolve either to a cure or sometimes to erosive esophagitis, plus all the complications of the refluxate beyond the stomach, should be carefully evaluated on clinical grounds in order to establish some actions for preventing GERD. In **Figure 1**, the general, digestive, and respiratory symptoms that fully or partially accompany GER appear. They should raise the suspicion level in the clinician. If, in addition, what we call 'alarm bells' appear, such as severity of symptoms (ALTE), hematemesis, anemia or failure to thrive, then this clinical sequence of regurgitation plus crying, arching, grimacing,... and respiratory complications are the warning bells that will make one consider additional studies or referral to a pediatric gastroenterologist.

The complementary studies include a wide number going from Orenstein questionnaires to the therapeutic trial. From them, worth commenting on are the following: 1) X-ray is not adequate for the GER diagnosis, but could be very useful for ruling out eventual malformations, stenosis, etc.; 2) Endoscopy and biopsy will be reserved for cases in which an erosive esophagitis is suspected; then the Los Angeles classification system should be used. The availability of new reduced-size endoscopes in comparison with the conventional pediatric ones could perhaps be of great help at these ages; 3) pH-metry is probably the technique used most, although its previous relevance is giving way to impedance studies. A reflux index (RI) greater than 4% of the extended pH monitoring time at pH < 4.0 has reasonable specificity and sensitivity only improved by measuring the area under the curve (AUC); obviously, if the RI cutoff is decreased then the number of cases will increase (3); and, 4) Intraluminal impedance works under the principle that if the esophagus is empty, few ions are present, and therefore, impedance is high. If it contains a bolus, then ions are present to a greater extent and impedance is low. This technique has additional channels for pH, O2, etc., but the important thing is that it detects liquid GER with pH <4; for pH 4-7 and pH >7, namely non-acid reflux. This is the case of patients treated with proton pump inhibitors (PPIs), in which heartburn (in older children) decreases but respiratory symptoms continue or even increase. The cost of the disposable probe is an inconvenience for its use. In summary, for an infant presenting the referred symptoms, one or more of these four procedures can disclose the presence of GERD.

TABLE 1. STOMACH CAPACITY

Full term	**40 - 50 ml**
1 month	**70 - 90 ml**
3 month	**125 - 150 ml**
6 month	**150 - 175 ml**
1 year	**200 - 250 ml**

FIGURE 1. INFANT REACTIONS IN THE OVERLAPPING AREA

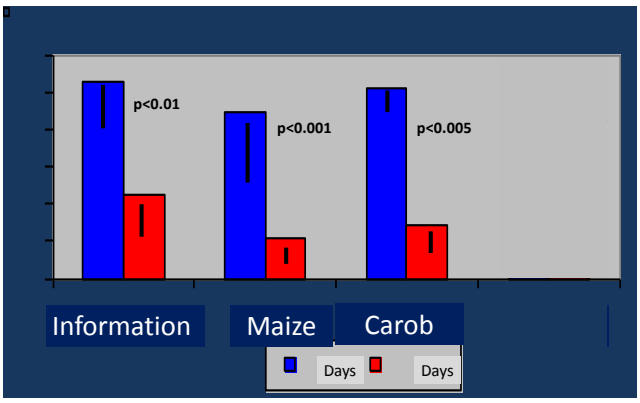


Crying
Irritability
Arching
Grunting
Grimacing
Regurg/ vomit
Chronic cough

ALARM BELLS

Severe symptoms
Haematemesis
Anemia
Weight loss
Failure to thrive

FIGURE 2. NUMBER OF REGURGITATIONS PER DAY



"In summary, for an infant presenting the referred symptoms, one or more of these four procedures can disclose the presence of GERD"

GER non-pharmacological treatments. The first and most important action is the regulation of food delivery. The volume per feeding should not exceed the gastric capacity, and the total volume per day should be around 150 mL/kg. If the infant is in a weaning stage, acid and reflux inducers (tomato, chocolate, carbonated beverages) should be avoided. This action is completed by a clear explanation to the parents about the nature of GER, its frequency (~50% of all infants), and its good evolution. The second action is related to the position of the infant. The prone position is followed by reduced regurgitations, but due to the risk of SIDS, should be recommended only if the baby is awake and being observed. The left side position after feeding is effective according an Australian study (4), but is difficult to maintain this position in the infant. The third action in case of persistence or worsening of symptoms is the two-week hypoallergenic formula trial just as a last attempt before starting pharmacological treatment. At this clinical stage, it is also possible to use thickened formulas by means of adding guar gum or cereals; their polysaccharide content increases formula viscosity and a reduction of GER (and slowing gastric emptying), and they are efficient. In a study carried out in our department (**Figure 2**), it can be seen how the reduction in the number of regurgitations (and the amount of them) were comparable to the group in which only information was given to the parents. In this study, carob thickener use was followed by a normal number of stools and weight gain in comparison to a group on formula with maize thickener.

Finally, a few words about the overuse of proton pump inhibitors (PPIs). The clear indication for them is erosive esophagitis (LA grading system) because they avoid acid reflux but not reflux. Then respiratory complications will remain in addition to the well-known complications (gastroenteritis, candidemia, bone submineralization, among others), and particularly the increased risk of clostridium difficile infections as clearly as was demonstrated in adults.

Manuel Moya

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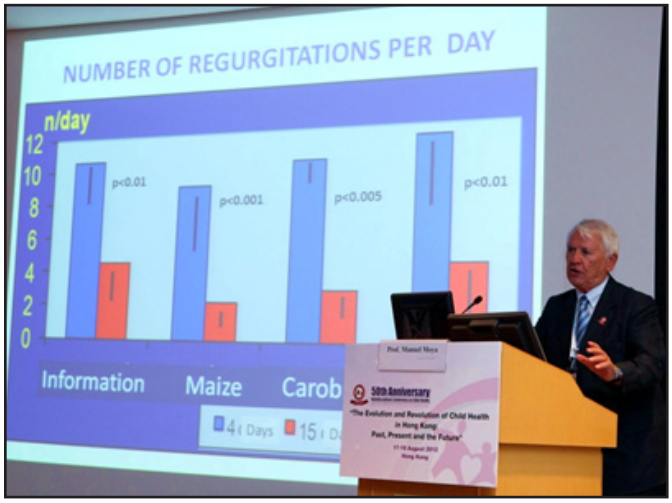
2. Boeckxstaens GE. Are reflux inhibitors a new therapeutic approach for gastro-esophageal reflux disease? European Gastroenterology & Hepatology Review 2011; 7: 10-13.
3. Tolia V, Wuerth A, Thomas R. Diagnostic interpretation of extended pH monitoring: is there a single best method? Dig Dis Sci 2005; 50: 94-99.
4. Omari T. Gastroesophageal reflux in infants: can a simple left side positioning strategy help this diagnostic and therapeutic conundrum? Minerva Pediatrica 2008; 60: 193-200.

EPA beyond Europe:

The Hong Kong Pediatric Society

Hong Kong Pediatric Society has a structure and a dynamic of functioning very similar to the most developed European pediatric societies. In last August they celebrated the 50th Anniversary with all the required solemnity. Professors Chok-wan Chan, Daniel Chiu and Lilian Wong organized this event and invited the American academy of Pediatrics and The European Pediatric Association. In the ample and updated scientific program Professor Manuel Moya, EPA Vice President, presented a lecture was in charge of the Multidisciplinary conference on child health and presented a topic with the title 'Update on infant nutrition, management of GER and other common GI problems with late consequences. Our felicitation to the HKPS for is present scientific status and ascending trajectory.



Special joint session by European Paediatric Association & The Journal of Pediatrics:

How to Evaluate and Treat Wheezing in the Pre-School Child

Saturday 1 December 2012
15.30-16.00

Speakers:
Professor Andrew Bush, Imperial College, UK, is a leading European expert on respiratory diseases. He will represent EPA.

Professor Robert W. Wilmott, Associate Editor of *The Journal of Pediatrics*, Saint Louis University, USA, will represent *The Journal of Pediatrics* and also participate as a US expert on pediatric pulmonology.

Register for the session via EiP2012:

http://2012.excellence-in-paediatrics.org/content/register-here

European Paediatric Association (EPA/UNEPSA)

Join the most extensive paediatric network in Europe!

Since the launch of the individual membership scheme, the European Paediatric Association (EPA/UNEPSA) embraces a constantly increasing number of individual members from all over Europe.

EPA/UNEPSA welcomes all doctors who are certified as paediatricians in Europe and are members of their respective National Paediatric Society/Association participating in EPA/UNEPSA.

By joining EPA/UNEPSA, you gain access to a network of 42 national European associations and open yourself to a new world of opportunities.

Benefits

The individual membership is offered at a privileged 50 Euro annual fee and encompasses a set of benefits that aim to provide value to the wide community of European paediatricians.

- Online access to the The Journal of Pediatrics is a core benefit of individual membership to our association and we are excited by the prospect of making such a valuable resource widely available to paediatricians across Europe.
- Our members will enjoy reduced registration fees to Europaediatrics as well as to other events organised by our Association.
- The quarterly e-newsletter aims to be a source of current information relevant to the interests of European paediatricians.
- Finally, our members will find in our new website a valuable tool and resource

Individual membership is offered on an annual basis starting on the 1 January of each year and ending on the 31 of December.

You may apply on line for an individual membership. Please visit our website www.epa-unepsa.org for more details and to fill out a registration form.

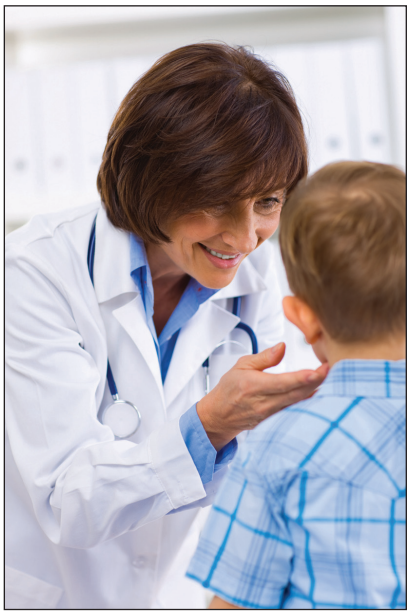
We look forward to welcoming all of you in EPA/UNEPSA!

The Journal of Pediatrics

Did you know...

that all individual members of EPA now also get a free subscription of The Journal of Pediatrics ?

EUROPEAN PAEDIATRIC ASSOCIATION (EPA / UNEPSA)



Building a pan-European Paediatric Community

Get acquainted with EPA/UNEPSA fellow members, visit now our Forum!

http://www.epa-unepsa.org/forums/forum-members

Upcoming conferences in 2012

EPA/UNEPSA Meetings

6th Europaediatrics Congress jointly held with the Royal College of Paediatrics and Child Health

5-8 June 2013, Glasgow, United Kingdom

Member and Affiliated Societies' Meetings

13th Annual Congress of the Portuguese Society of Paediatrics (SPP)

11-13 October 2012, Troia, Portugal

X Congress of the Croatian Paediatric Society

18-21 October 2012, Pula, Croatia

NVK-Congress 2012-Dutch Association of Paediatrics

31 October - 2 November 2012, The Netherlands

XVII Summit of Pediatricians of Russia with International Participation - "Actual Problems of Pediatrics"

14-17 February 2013, Moscow, Russia

Other Paediatric Meetings in Europe

2nd PNAE Congress on Paediatric Nursing

7-8 June 2013, Glasgow, United Kingdom

Excellence in Paediatrics 2012

28 November-1 December 2012, Madrid, Spain

List of member countries and links to societies' websites

Albania
Albanian Paediatric Society

Armenia
Armenian Association of Paediatrics

Austria
Oesterrechische Gesellschaft fur Kinder-und Jugendheilkunde (OEGKJ)

Belgium
Societe Belge de Pédiatrie/Belgische Vereiniging voor Kindergeneeskunde

Bosnia and Herzegovina
Paediatric Society of Bosnia and Herzegovina

Bulgaria
Bulgarian Paediatric Association

Croatia
Croatian Paediatric Society

Cyprus
Cypriot Paediatric Society

Czech Republic
Czech National Paediatric Society

Denmark
Dansk Paediatrisc Selskab

Estonia
Estonian Paediatric Association

Finland
Finnish Paediatric Society

France
Société Française de Pédiatrie

Georgia
Georgian Paediatric Association

Germany
Deutsche Gesellschaft für Kinder- und Jugendmedizin (DGKJ)

Greece
Hellenic Paediatric Society

Hungary
Hungarian Paediatric Association

Ireland
Royal College of Physicians of Ireland/Faculty of Paediatrics

Israel
Israeli Paediatric Association

Italy
Società Italiana di Pediatria

Società Italiana di Ricerca Pediatria

Latvia
Latvijas Pediatru Asociacija

Lithuania
Lithuanian Paediatric Society

Luxembourg
Société Luxembourgeoise de Pédiatrie

Macedonia
Paediatric Society of Macedonia

Moldova
Moldovan Paediatric Society

The Netherlands
Nederlandse Vereninging voor Kindergeneeskunde

Poland
Polskie Towarzystwo Pediatryczne

Portugal
Sociedade Portuguesa de Pediatria

Romania
Societatea Romana de Pediatrie

Societatea Romana de Pediatrie Sociala

Russia
The Union of Paediatricians of Russia

Serbia and Montenegro
Paediatric Association of Serbia and Montenegro

Slovakia
Slovenska Paediatricka Spolocnost

Slovenia
Slovenian Paediatric Society

Spain
Asociación Española de Pediatría

Sweden
Svenska Barnlakarforeningen

Switzerland
Société Suisse de Pédiatrie/Schweizerische Gesellschaft für Padiatrie

Turkey
Türk Pediatri Kurumu

Türkiye Milli Pediatri Dernegi

Ukraine
Ukraine Paediatric Association

United Kingdom
Royal College of Paediatrics and Child Health

ACKNOWLEDGEMENTS

EPA Welcomes Corporate Partners

EPA is an association for medical professionals. Our network is a fantastic talent pool of 44,000 paediatric healthcare professionals, who every year share their brilliant questions and suggestions on how to best understand and improve general paediatric practice. EPA always responds to such important feedback. Importantly, however, to be able to address shared issues, unmet needs or to develop good ideas and exciting initiatives, even after prioritisation, we need external financial resources.

EPA has therefore developed a corporate partnership programme that allows companies to support our work provided they share our mission and values, and comply with our ethical principles and Guidelines for Relations with Industry. Jointly we can understand diverse issues better, and develop targeted activities to effectively meet paediatricians' needs for medical education, best practice guidelines, and interactive communication. By working, learning and developing together - by proactively combining our strengths - we can develop and improve the clinical standards, and ultimately also European child health.

EPA would like to welcome its corporate partners and acknowledge their support in the development of the following exciting initiatives:

Dettol

Good Health begins with Good Hygiene
EPA and Reckitt Benckiser (RB) ,believe that good hygiene is a key ingredient to good health and work jointly to educate the public on the benefits of adopting good hygiene habits, both personal, in the home, and to explain why good health begins with good hygiene.

Pfizer Nutrition

Early Feeding Initiative
EPA and Pfizer Nutrition believe the chances of a healthy life are greatly facilitated by a healthy infancy period. This, in turn, is facilitated by a balanced nutrition. Breastfeeding should be the norm, but where not possible balanced dietary alternatives must be available. EPA and Pfizer Nutrition promote the new paradigm in early feeding which emphasizes the need of a balanced diet also throughout infancy.

PHILIPS AVENT

Helping Mothers Breastfeed Longer through Advanced Education
EPA and Philips AVENT believe breastfeeding is best for the infant and that paediatricians and health care professionals can often provide invaluable advice to mothers to initiate and sustain their breastfeeding routine. To this end, we are jointly developing an exciting educational programme, presenting state of the art knowledge as it applies to clinical practice.

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We would appreciate your feedback, keeping our newsletter updated!
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