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LETTERS TO THE EDITOR

The different spectra of cow's milk allergy

Dear Editor,

Cow's milk allergy (CMA) continues to be a great challenge in pediatric practice. It is estimated to affect around 2.5% of children less than three years old and is responsible for a vast array of symptoms.[1] Machado et al. recently published a description of two children who presented hemorrhagic gastritis due to ALV.[2] The report is important because it highlights the occurrence, rare, but serious, of upper digestive hemorrhage in children with CMA. Certain comments, however, should be made. Cow's milk allergies, like all food allergies, are classically divided into those mediated by IgE, those not mediated by IgE and mixed cases.[3] This classification is important because of the differences between their clinical and laboratory manifestations and the dietary measures necessary for their management.

In Table 1 the primary characteristics of type of CMA manifestation are summed up. As we can observe, reactions mediated by IgE, despite being responsible for around 60% of CMA, are less common among children with gastrointestinal manifestations.[4]

Double blind placebo controlled provocation (DBPCP) is considered the gold standard for CMA diagnosis, irrespective of the immunological mechanism involved.[5] Laboratory tests are of little use in CMA cases that are not mediated by IgE, but of great use in allergies that are. Specific IgE assay should always be performed in such cases.[4,5] Cutaneous tests may actually return reduced results in children under two, but are usually positive, while RAST does not have this limitation.[5,6] These tests indicate a possible association between cow's milk and the symptoms exhibited, but should not be used for CMA diagnosis because of their low positive predictive power (below 50%). On the other hand, negative results do practically rule out the possibility of CMA mediated by IgE, with negative predictive power close to 95%.[5] More recently, some authors have demonstrated a good level of correlation between IgE cow's milk antibodies (CAP FEIA) and the presence of symptomatic cow's milk allergy mediated by IgE.[4] Garcia-Ara et al. demonstrated serum IgE antibody levels in children less than 1 year old. These values exhibit a positive predictive power of 95% for CMA diagnosis, when compared with DBPCFC, hitherto considered the gold standard.[6]

In the two cases described by Machado et al. the reintroduction of cow's milk was performed at two years of age, with success.[2] This pattern is typical of that observed

Table 1 - Characteristics of food allergy manifestation according to the immunologic mechanism

	Mediated by IgE	**Mixed**	**Not mediated by IgE**
Symptoms	Nettle-rash, asthma, rinitis, anaphylaxia, oral allergy syndrome, immediate gastrointestinal hypersensibility*	Allergic eosinophylic esophagitis, gastritis and gastroenteritis	Enterocolitis, proctitis, celiac disease
Age of onset	Infant, preschool age	Infant to adolescent	One day to one year
Related food	Milk, soy, cereals, egg, fish	Milk, wheat, soy, egg	Milk, egg, soy
Treatment	Dietary restriction	Dietary restriction; good response to proteic hydrolysates and oral corticosteroids	Dietary restriction; quick response to the treatment
Natural hystory	80% of remission up to 3 years old	80% of remission up to 1 year (milk); other hypersensibilities may last for one more year	Remission after 1 to 3 years

* Clinical manifestations: nausea, vomiting, diahrrea, abdominal pain.

in CMA not mediated by IgE. Cow's milk tolerance may appear later in IgE mediated cases or even persist for many years.[1]

A diagnosis of CMA in a child implies, without exception, the need to implement an exclusion diet. This measure results in elevated expense for the family and risk of compromised pondero-statural growth. The concomitant presence of both cow's milk and soy allergies is common among children with reactions that are not mediated by IgE, although studies using double blind placebo controlled provocation recorded the prevalence in children with reactions that are mediated by IgE as below 15%.[7,8] This being the case, base-base formulae should be considered as a first choice for these children.

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Authors' reply

Dear editor,

We are grateful for the comments made by Dr Wandalsen et al. on the case history "Hemorrhagic gastritis due to cow's milk allergy: report of two cases", published in this journal,[1] with the objective of describing gastritis associated with cow's milk allergy as the cause of upper digestive hemorrhage in infants. The observations contribute to the discussion deepening the revision of food allergies in terms of the immunological mechanism associated with the clinical status.

As mentioned, the clinical status of the patients described was highly suggestive of non IgE-dependant allergy, which mechanisms are responsible for the majority of food allergies. In this type of food allergy, the first choice for baby formula is indeed highly hydrolyzed protein.[2,3] Unfortunately the high cost of managing these patients can make this option unviable in certain circumstances. In contrast, Soya-based formula can be used as an initial option for patients with IgE-dependent allergies when there are symptoms suggestive of immediate reaginic response, the presence of specific anti-cow's-milk IgE antibodies and the absence of specific anti-Soya IgE antibodies.[3] In cases where Soya is employed, patients should be carefully monitored and their improvement documented within two to four weeks.[3] The option should be frequently reviewed. It should be pointed out that maternal breastfeeding for at least 4 to 6 months has a prominent role in preventing infant food allergies.[2-4]

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Breastfeeding – rethinking the difficulties

To the editor of the Jornal de Pediatria,

The Jornal de Pediatria's auspicious publication of two research papers and an editorial, all of an elevated level, on breastfeeding difficulties and their consequence - early weaning, was most opportune.

Carvalhaes and Corrêa attempted to detect the problems encountered during the first hours and days of suckling which could possibly prevent its success.[1]

In the respective editorial, Sonia Venancio (herself with a history of implementing healthy care practices in maternity units) insists that the high frequency of women with problems during the initial phase of breastfeeding could be associated with inadequate and prejudicial hospital practice.[2]

The research performed by Ramos and Almeida[3] had a completely different approach - it is a qualitative health study which performs a comprehensive analysis of the reasons given by mothers for early weaning and so demonstrating that the decision making process is complex and loaded with guilt involving the loneliness/isolation of the woman-mother and her desperate need for support.

As for the solutions offered, Venancio[2] hopes that the sensitization of management and health professionals will lead to the amplification of the Child Friendly Hospital Initiative in our country.

Carvalhaes and Corrêa[1] recommend the evaluation of the frequency of behavior which is unfavorable to breastfeeding by means of the routine adoption of a protocol distributed by UNICEF and based on observation of the mother-newborn couplet during suckling. Poor scores (unfavorable) constitute an alarm, alerting to immediate weaning and may indicate a prolonged hospital stay or domestic support interventions.

In turn, Ramos and Almeida[3] reflect on the need to reform the current care model in the sense of substituting the simple promotion and distribution of information with new cultural values that consider breastfeeding as an act that must be learnt by the mother and protected by society.

Evidently, they are all right in their own way and the solutions offered do not conflict, rather they complete each other.

To clarify the debate it is necessary to remember that breastfeeding support is divided into two distinct stages. The first and, perhaps, more important stage covers the first two weeks of life, the period during which breastfeeding is most vulnerable. It is during this period that the mother's decision to breastfeed will be put to the test and it is even possible that mothers who had decided not to breastfeed will reverse their decision at this point.

Efficient and pleasurable suckling from the start is the way to establish breastfeeding; the alternative leads to failure, even among mothers who were initially predisposed to breastfeed.

What can be done? The first thing is to correct the classic care practices at maternity units that are prejudicial to maternal breastfeeding. While we have not reached the ideal, there has already been substantial improvement and we must be alert to the fact that the intemperate offer of glucose solution and feeding bottles may not be the cause, but the result of breastfeeding difficulties. It is imperative to detect this difficulty as early as possible. To do this, it is absolutely imperative that the first attempts at suckling be observed under guidance of a protocol such as the UNICEF form, ideally modified to include contributions such as those made by Tereza Sanches[4] (speech therapist at the Santos Lactation Center/Hospital /Guilherme Alvaro, FCM/Santos) and which should be an obligatory part of medical records at all maternity units. The objective is first to make the team that cares for the mother-newborn couplet more conscious and second to select those cases that require intensive support at the start of breastfeeding.[2]

All of the health professionals involved need to substitute their current position of simple sympathy (or possibly even of lack of consideration), which may be the fruit of simple ignorance, for true empathy (to be attuned to or to feel what the other is feeling). However, this implies transforming the simple retransmission of information with a true learning process, which implies support, stimulation and technical guidance in order to avoid or correct the number one enemy of a successful start to breastfeeding - inefficient suckling ("the baby that doesn't know how to suck").[5] In order to capacitate health teams at maternity units in the basic management of breastfeeding, there is the UNICEF/WHO 18-hour course, "Breastfeeding Management and Promotion in a Baby-Friendly Hospital" which should also be made compulsory, without compromising the formation of elite breastfeeding management teams who would function within maternity units in a similar manner to the nosocomial infection prevention teams. Careful observation of risk cases should include resetting the date of discharge from the maternity unit, making an appointment for the first return consultation, home visits, referral, according to protocol, to "Child Friendly" outpatients health centers (with experts on maternal breastfeeding), indoctrination of family members and the community. On this last point the media should once more be brought into play. So far the media has managed to fix in the public mind the need for 6 months' breastfeeding, but, paradoxically, has fed the erroneous concept that 6 months are sufficient. The strategy outlined here should form a new stage in the perm ant program for maternal breastfeeding promotion. It is no longer sufficient to question the concepts of "weak milk" and "not enough milk". Does "weak milk" exist? Does "not enough milk" exist? Of course they do. Popular wisdom is always correct since it is based on empirical observation; what may be incorrect is the interpretation (but this also occurs with the most gifted researchers). When the baby suckles incorrectly it cannot extract sufficient milk ("not enough milk") and it doesn't receive the higher-calorie milk at the end ("weak milk") which may lead to the "crybaby" or "sleepyhead" effects, malnutrition, dehydration and jaundice; erroneously

called "early jaundice from maternal milk" when in fact it is jaundice from insufficient ingestion of maternal milk.

Now that the difficult stage of maternal breastfeeding promotion has been passed, it is time to enter deep into a new phase, "consider it an act which needs to be learnt by the mother [with the extension of the Child Friendly Hospital Initiative and the training of health professionals involved] and protected by society."

Jayme Murahovschi

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Author's reply

Taking account of the scientific evidence that has accumulated in favor of the practice of breastfeeding and bearing in mind the advances achieved in our country in terms of the expansion of this practice during recent decades,[1] we are left with the great challenge of overcoming the remaining obstacles to the fulfillment of the WHO's recommendation of "exclusive breastfeeding for the first six months of life and the maintenance of breastfeeding, with complementary foods, until the second year of life or more ".

We are slowly reconstructing the breastfeeding culture that was practically destroyed at the end of the nineteenth century. Among other contributing factors was the industrialization and marketing of artificial milk products, which seduced women and health professionals to indiscriminately employ artificial milk to feed babies.

In reaction to the consequences of early weaning, especially the increases in infant mortality, a worldwide movement for a return to breastfeeding sprang up during the seventies.

The route followed in our country was the protection, promotion and support of breastfeeding and the conquests made by this movement are undeniable.

We will take, as an example relating to protection, the 120-day maternity leave and the adoption of the Brazilian Baby Food Marketing Standard. However, the debate about the need for a defense of breastfeeding proceeds, with issues such as the extension of maternity leave and the definition of efficient mechanisms for enforcing such legislation.

Brazil has been prominent, since 1992, in carrying out World Breastfeeding Week activities, which are part of an important strategy to involve the press in the promotion of breastfeeding. It is, unfortunately, the case that the press has not always been particularly "breastfeeding-friendly" as it is common for images of babies with bottles and pacifiers to be used in publicity campaigns.

With respect of the support afforded to breastfeeding within health services I would extend the list presented by Prof. Jayme Murahovschi with certain other elements.

When reflecting on this support, in terms of how it is manifest in the day-to-day routine of our services it is important to take account of the general political context. The Brazilian National Health Service (SUS - Sistema Único de Saúde) counts among its guiding principles and directives: universality, the integration of care, participation, the use of epidemiology to establish priorities and the decentralization of operations with emphasis on regionalization and a hierarchical structure within the health service network.[2]

To advance in breastfeeding support implies the definition of a policy, whether at a federal, state or municipal level. To think of breastfeeding as a public policy means transforming the support of mothers, in many situations carried out by "flag waving" health professionals into something that is accessible to all women and which offers them equal opportunities to receive information, guidance and the support the require in order to breastfeed.

To define breastfeeding as a health priority implies the adoption, by management, of strategies to organize care, allocate resources and capacitate human resources.

The Child-Friendly Hospital Initiative, the target of a recently published Jornal de Pediatria editorial,[3] is a strategy that has been adopted to promote that so hoped-for change in hospital practices at the moment of birth. By means of the "Ten steps to successful breastfeeding" recommendations it proposes to truly revolutionize maternity unit routines and demands profound reflection on the paradigm hitherto adopted.

Research shows that taking each on of the ten step has an impact upon breastfeeding[4] and to be born in a Child-Friendly hospital significantly increases the chance of a child still being exclusively breastfed at four months.[5]

It is not, however, expected that two of the ten steps be taken within the hospital environment. The prenatal instruction of expectant mothers and the referral of mothers, at the point of hospital discharge, to breastfeeding support groups are expected to be developed within the basic health care system and, therefore, it is fundamental that the CFHI includes initiatives aimed at the basic health centers.

As Prof. Jayme Murahovschi so rightly reminded us, apart from delivery itself, the first two weeks are crucial to the establishment of breastfeeding. How can weaning be predicted if many children only arrive at the health center when already

one month old? This issue is fundamental to an analysis of role of basic health care in breastfeeding support.

Another issue to be taken into account in this debate is the posture of or approach used by professionals in their support work and the breastfeeding training they have available.

The UNICEF course "Breastfeeding Management and Promotion in a Baby-Friendly Hospital" UNICEF/WHO has short (18 hour) duration in its favor along with the low cost and the flexibility with which it can be attended. However, it goes very little into fundamental content, such as is included in the WHO/UNICEF 40-hour program "Breastfeeding Counseling: a training course", which, in addition to lactation management includes the skills "listen to and learn with the mother" and "how to generate confidence and give support ".

Evaluation of this proposal[6] showed that the course has a positive impact on the development of counseling skills, but that because of its duration (40 hours) and the need to attend for a week with no interruptions there has been little take-up in our country.

Finally, it is important to reflect on the contribution of research in this area. Among the many applications for epidemiology, its use for the diagnosis and monitoring of breastfeeding status stands out. Data from such research, if accessible to managers, can be used as an important tool for planning and assessment of policies. Thus epidemiological is indispensable to work on breastfeeding in a Public Health context. Qualitative research, in turn, has brought to the surface the need to learn more from mothers about the complex interaction between factors that permit the option of breastfeeding and factors that influence this practice, on an individual level.

Analyses of breastfeeding tendencies in Brazil in a number of different municipalities are encouraging, since many obstacles have been overcome and many advances made. We still, however, have a long way to go in this battle, to guarantee what is a basic right of women and children.

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Pediatric stem cell transplantation: a worthwhile effort

We received with interest the comments made by Ribeiro,[1] on our recently published Jornal de Pediatria[2] article. The author goes into a number of different important aspects of the results of hematopoietic stem cells in children for whom it is indicated. In the state of Rio Grande do Sul there is an estimated occurrence of 300 new infant or juvenile cancer cases annually. Of these approximately 10% are potential candidates for programs of this type. In Brazil, very few centers offer this type of treatment and many patients die before receiving transplantation because of the long waiting list. Therefore, to offer this type of treatment to patients in our state was always a challenge. This being so the Pediatric Oncology Unit at the Hospital de Clínicas in Porto Alegre (HCPA) has offered an autologous and allogeneic hematopoietic stem cell transplantation service since 1998, and was the pioneer in the state of Rio Grande do Sul in cord blood cell transplantation from unrelated donors.[3] Today our service is an important pediatric transplantation center, with multidisciplinary teams who rigorously evaluate transplant indications and employ uniform treatment criteria.

No patient has ever forgone transplantation because of their family's economic limitations. This is a result of the extremely efficient functioning of our Social Service and of the opportunities offered by the Rio Grande do Sul Childhood Cancer Institute, which is a non-governmental support organization for children with cancer and their families.

The objective of our study was to study, retrospectively, the most common acute complications among transplant patients, making a simple comparison with published data. It was not the objective of our paper to compare the survival of transplant patients with that of those who received conventional chemotherapy, which would, perhaps, demand prospective and randomized studies, which often end up being limited by the small number of patients.

We would like to salute with enthusiasm the constitution of the Brazilian Pediatric Oncology Society (SOBOPE - Sociedade Brasileira de Oncologia Pediátrica) Bone Marrow Transplantation Committee, which is nowadays recognized as one of the most active committees among the cooperative groups within SOBOPE, and of which the pediatric oncologists responsible for transplantation at our center are members.

We know that the centers that perform bone marrow transplantation in Brazil, represented by the Brazilian Bone Marrow Transplantation Society (SBTMO - Sociedade Brasileira de Transplante de Medula Óssea), SOBOPE, The Brazilian Hematology and Hemotherapy Society and the Brazilian College of Hematology are widening their channels of communication with each other and with the Health Ministry, with the aim of better understanding the limitations, potential and real, in the few Brazilian states which have centers capable of offering hematopoietic stem cell transplantation, and, in collaboration with other international centers, refine ever further the programs that are running, whilst supporting the creation of new centers in less privileged regions. These efforts are absolutely necessary for us to assure a future in which, as Ribeiro suggests, all children have the same opportunity of receiving transplantation.

We are grateful for the comments made which we consider as stimulating the continuity of our program, which, as we demonstrated in our paper[2] is presenting encouraging results.

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