## Effects of childhood infections and vaccination on atopy development.

Adler, UC. - November, 05.

## Are infections in infancy protection factors against atopy? Is childhood vaccination a risk factor for the development of atopy?

With no intention to engage in controversy, but aiming to furnish for consideration of the homeopathic community scientific answers for the important questions above, I presented a systematic review of all Mediline (1993-2004) papers which could provide direct epidemiological evidence on the subject. The conclusion of this review was a double negative answer, i.e.:

- infections in infancy are not protection factors against atopy;
- vaccination is not a risk factor for the development of the atopy <sup>1</sup>.

These results engendered some debate not only in the past issue of *Homeopathy*, but also at the 60<sup>th</sup> Congress of the *Liga Medicorum Homeopathica Internationalis* - Berlin, where the same review was presented as a lecture. Unprejudiced debate about childhood infections and their vaccines seems an important step for a Homeopathy accustomed to act in accordance to observations *'empirically cited over the centuries by homeopathic physicians*<sup>2</sup>.

Childhood infections have been hypothesized as shields to allergy by *indirect* clues. For instance, there are consistent associations between allergic manifestations and urban, smaller and wealthier families<sup>3</sup>.

If that hypothesis proved to be true, vaccination – avoiding childhood infections should also be allergenic. However, studies in humans populations about the *direct* effect of infections or vaccines on atopy development have pointed out to the opposite conclusion, i.e., up to the present knowledge, <u>childhood infections are noxious and most of the common vaccines are neutral or even protective agents</u> <sup>3 4</sup>

There are probably still unclear anti-allergic factors that were initially miscomprehended as infectious diseases in early infancy. For instance, in the previous issue of this debate section, concerning the results of the review made by Flohr *et al.*, Teixeira mentioned that the *'results showed that there was prospective evidence to support an inverse relationship between atopic dermatitis and endotoxins, early day care and animal exposure*<sup>48</sup>. Unfortunately, Teixeira did not mention that, according to the conclusion of Flohr *et al.* that relationship is not due to any childhood infection, like measles or pertussis: *'Although population-based studies have suggested a consistent inverse relationship between atopic dermatitis and increasing family size, this does not seem to be explained by a straightforward increased exposure to a single environmental pathogen. The effect seen with early day care, endotoxin, and animal exposure may be due to a nonpathogenic microbial stimulus of a chronic or recurrent nature.<sup>4</sup>.* 

Acute childhood infectious diseases cannot be classified as '*nonpathogenic microbial stimulus of a chronic or recurrent nature'*. Helminthes or intestinal flora could be responsible for this chronic stimulus and protection against atopic dermatitis, as stressed by my review and many studies since the 70's<sup>10</sup>.

Teixeira also quoted one of the conclusions achieved by Koppen *et al* in their review on vaccination and atopy: 'at this moment there is insufficient evidence to accept or reject a causal relation between early BCG vaccination and the development of allergic diseases<sup>48</sup>. However, Teixeira did not quote Koppen's team final conclusions in the same article: 'Based on the best available epidemiological evidence, however, we conclude that there is no convincing evidence that these immunological mechanisms translate into a contribution of infant vaccinations against diphtheria, pertussis, tetanus, mumps and rubella to the development of atopic diseases. Therefore, our review of current evidence strengthens earlier conclusions that these infant vaccinations do not increase their risk of development of allergic diseases<sup>11</sup>.

Eskinazi proposed a workshop to further discuss vaccination and atopy<sup>12</sup>. His standpoint: '*the real issue is not whether vaccines are good or bad in general*' agrees with mine: '*Vaccines are heterogeneous products, each one with their specific immunogenic characteristics, which should be separately analyzed*'<sup>1</sup>. In spite of that, up to the present, 'the best available <u>epidemiological</u> evidence' shows us that childhood infections - and not common vaccines - are to be feared in regard to atopy sensitization or disease. Until new epidemiological data contest these findings, I see no reason for a workshop, unless we decided to discuss why Homeopathy has not taken in consideration Hahnemann's observations, whom had emphasized the benefits of Jenner vaccination<sup>13</sup> and the risk that epidemics represented for the development of chronic diseases<sup>14</sup>.

## References

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<sup>13</sup> Hahnemann S. Organon der Heilkunst: aude sapere. 6. ed. Richard Haehl, Leipzig, Schwuabe, 1921, Heidelberg, Haug, 1988, paragraph 46.

<sup>14</sup> Hahnemann S. Die chronischen Krankheiten, ihre eigentüml. Natur u. homöopath. Heilung. vol 1, 2. ed., 1835. Heidelberg, Haug,, 4. print., 1988, p.166.