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CAN BREAST FEEDING CAUSE AUTOIMMUNE DISEASE?

The Hospital for Rheumatic Diseases, Department of Internal Medicine, Hanyang University College of Medicine
Seung Cheol Shim*, Tae-Hwan Kim, Dae Kook Chang, Hee Kwan Koh, Jae-Bum Jun, Sung Soo Jung, In Hong Lee, Sang-Cheol Bae, Dae-Hyun Yoo,and Seong Yoon Kim.

Introduction: Human infant's normal immunologic development likely depends heavily on breast milk. Human colostrum has antiinflammatory properties which could lead to enhanced tolerance, a decrease in the incidence of autoimmune disorders such as insulin-dependent diabetes mellitus and allergic diseases. Recently, T helper 1 cell type response to MMR vaccination was shown in the breast-fed but not in the formula-fed infants, and T cell stimulation factor was found in human breast milk.

Objective: To evaluate any association between breast feeding and further development of autoimmune disease, and to find out any difference of feeding mode in the patients between with ankylosing spondylitis (AS) and with rheumatoid arthritis (RA).

Methods: We surveyed 70 patients with AS and 30 patients with RA, whose symptoms had begun before the age of 16 years, and compared the results with those of 1097 control subjects.

Results: All the patients (83.8%) were more likely than an unmatched control population (73.9%) to have been breast fed (OR=1.82, p=0.07), and there was no significant difference between AS (82.5%) and RA (87.5%). Surprisingly, patients with AS (66.1%) had taken significantly less colostrum than those with RA (87.5%) ($p<0.05$). The average duration of breast feeding in AS (13.0±12.2 months) was significantly shorter than in RA (20.5±14.1 months, $p<0.01$). There was insignificant difference in the mean age of the mother and children, duration of the disease, the number of sibling and the site of residence.

Conclusion: All the patients had been breast-fed more frequently than healthy control. The AS group had been breast-fed shorter than the RA group, and the AS group had taken less colostrum than the RA group. As results, we suggest that the difference in feeding mode could be one of the etiologic factors in various autoimmune diseases.

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PALINDROMIC ATTACKS TRIGGERED BY PHYSICAL ACTIVTIY

The Hospital for Rheumatic Diseases, Department of Internal Medicine, Hanyang University College of Medicine
Hee Kwan Koh*, Young Bae Oh, Dae Kook Chang, Seung Cheol Shim, Tae-Hwan Kim,
Jae-Bum Jun,Sung Soo Jung, In Hong Lee, Sang Cheol Bae, Dae-Hyun Yoo, Seong Yoon Kim

Palindromic rheumatism (PR) is known to be triggered without any obviously inciting event in most patients, although, in a few cases, attacks have been noted to relate to another event such as weather change, childbirth, ingestion of certain foods, or overexercise. The aim of this study was to further characterize the triggering factors on palindromic attack, especially including physical activity.

We evaluated ninety-six patients with PR. The mean age was 45.1 ± 9.5 years, the age of disease onset 32.2 ± 8.4 years, the ratio of male to female 1:1.2 and the follow-up duration 2.7 ± 2.7 years (range: 5 weeks – 10.3 years). The frequency of attacks was 3.5 ± 2.5 times / month. The rheumatoid factor was positive in 20 cases (15.6%, 89.8±85.6 IU/ml). The affected joints were as follows: small joints of hand (85.9%), knee (78.1%), wrist (53.1%), small joints of foot (37.5%), ankle (32.8%), elbow (30%), shoulder (26.6%), temporomandibular joint (17.1%), and other joints (18.8%).

In 77 patients (80.2%), there was a clear association between episodes of PR and initiating events. Patients with triggering factors had single (78.4%) or multiple factors (21.6%). The triggering factors were physical activity (65/96: 67.7%), foods including alcohol (19/96: 19.8%), weather change (9/96: 9.4%). PR was associated with physical activity such as rapid walking, running, hammering, climbing, limb exercise, typewriting, sexual intercourse, and even houseworking in women. PR was associated with foods such as rawfish, crab, chicken, pork (1 case each), and alcohol (15 cases).

Our observations showed that PR was triggered by physical activity rather than in previous reports and the avoidance of triggering factors decreased palindromic attacks. Therefore, recognizing factors triggering palindromic attacks, often overlooked, may be important in the management of PR. These results suggest that certain mechanical factors rather than immunologic factors may be a role in the etiopathogenesis of PR.