



Utility of Thymus and Activation-Regulated Chemokine for Diagnosing Food Protein-Induced Enterocolitis Syndrome at the First Episode

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To the Editor: Food protein-induced enterocolitis syndrome (FPIES) causes vomiting several hours after causative food's ingestion, and its reactions often improve several hours compared with the usual several-day time course of gastroenteritis [1]. Diagnosis of FPIES often requires multiple episodes. If only a single episode has occurred, an oral food challenge (OFC) is recommended [1]. Because OFCs may induce strong symptoms, markers that can diagnose FPIES at the first episode without OFCs are desirable.

Case 1 A 5-mo-old boy without atopic dermatitis (AD) was admitted to our hospital due to vomiting. Approximately 3 h before he began vomiting, he had drunk milk for the first time since being discharged from the maternity hospital; therefore, we suspected FPIES due to milk. His symptoms improved after several hours. The next-day thymus and activation-regulated chemokine (TARC) was as high as 5503 pg/mL. One month later, he vomited 3 h after a milk challenge test. Thus, he was diagnosed with FPIES due to milk.

Case 2 A 7-mo-old boy without AD was admitted to our hospital due to vomiting. He had ingested egg yolk 3 h before he began vomiting. We suspected FPIES due to egg yolk, which has recently become more common in Japan [2]. His symptoms improved after several hours. The next-day TARC was as high as 5278 pg/mL. Two months later, he vomited 3 h after egg yolk ingestion. Thus, he was diagnosed with FPIES due to egg yolk.

TARC, which is a chemokine inducing Th2 response, is a marker reflecting the disease activity of AD [3]. TARC has also been reported to increase 24 h after causative foods

ingestion in FPIES [4]. If infants vomit several hours after eating foods likely to cause FPIES and those symptoms improve faster compared to gastroenteritis, the next-day TARC may be a strong indicator of FPIES.

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Declarations

Conflict of Interest None.

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