

ケラチノサイトでは、皮膚分化マーカーの発現増強が見られ、細胞増殖が促進された。さらに、ASK1 の恒常的活性型およびドミナントネガティブの発現ベクターを遺伝子導入した再構成系での解析より、ASK1 が AhR 発現を阻害することが示された。

以上より、当初の予想に反して、ASK1 が乾癬発症を抑制し、この機序には、ASK1 による AhR 発現の阻害が関与している可能性が示唆された。

2-2.

Vitamin D in early infants infected with respiratory syncytial virus

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Respiratory syncytial virus (RSV) is the main cause of lower respiratory tract infections in Japan and is the most frequently encountered pathogenic microorganism in hospitalized infants. RSV causes clinical diseases such as bronchiolitis and pneumonia. Recently, more attention is being paid to the association between RSV infection and vitamin D deficiency, which is reported to be related to the incidence of RSV infection in the first year of life. Low levels of 25-OH vitamin D receptor polymorphisms have also been reported as a genetic predisposition to RSV bronchiolitis. Serum vitamin D levels in infants vary according to the region of residence and are affected by the duration and amount of sun exposure and diet. We aimed to clarify the involvement of vitamin D deficiency in RSV infection in infants in Japan (Tokyo area). For this purpose, serum 25-OH vitamin D levels of infants aged <3 months who were hospitalized for RSV infection were examined using chemiluminescence enzyme immunoassay.

Serum 25-OH vitamin D levels in 10 infants, excluding infants with underlying disease, were between 4 and 29.8 ng/mL. Serum 25-OH vitamin D levels were <20 ng/mL in 8 of the 9 subjects. Although these levels were lower than those of infants hospitalized for other diseases at the same age, they were not significantly different. Serum N-terminal pronatriuretic peptide

(NT-proBNP) levels were significantly higher in one of nine subjects. There was no statistically significant association between serum 25-OH vitamin D levels and age, length of hospital stay, respiratory severity score, white blood cell count, blood gas levels, and NT-proBNP levels. These results indicate that vitamin D deficiency affects the susceptibility of subjects to RSV infection but not their severity of RSV infection. In the future, we will increase the number of cases and conduct a literature review.

2-3.

Comparison of Serum Cytokine/Chemokine and FGF23 levels between Steroid Sensitive Nephrotic Syndrome and Frequently Relapsing Nephrotic Syndrome in Children : An exploratory case-control study

(社会人大学院博士課程 4 年小児科・思春期科)

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【Background】 In Japan, nearly 80% of Nephrotic syndrome (NS) is steroid sensitive NS (SSNS). Up to 50% of SSNS develop frequently relapsing NS (FRNS), and 50% of FRNS children are steroid-dependent NS (SDNS). However, there are without relapse NS cases where children recovered completely. Predisposing factors between FRNS/SDNS and without relapse NS are unknown. We measured the serum levels of cytokines/chemokines in active and remissive stages of NS to find out if changes in levels could be related between FRNS/SDNS and without relapse NS, and whether there is a predisposing factor including serum FGF23 which represent progression of chronic kidney disease in adults. **【Methods】** We enrolled 15 children with primary NS admitted in our department from 2010 to 2019, followed up duration ranged from 2 to 10 years. The serum levels of 40 cytokines/chemokines were measured using a Bio-Plex suspension array (Bio-Rad Laboratories) at active and remissive stages. The serum FGF 23 was measured using a RayBio[®] Human FGF-23 ELISA kit assay (RayBiotech Life) at the onset of NS.