Successful management of treatment-related toxicity with Daikenchuto during the anti-cancer treatment in a patient with Down syndrome

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Recent advances in cancer chemotherapy has dramatically improved the prognosis of cancer patients in children. Patients with Down syndrome (DS) are prone to develop particular types of the pediatric cancer. In this regard, it is widely recognized that DS patients frequently develop intractable treatment-related toxicity, and thus it is highly warranted to establish effective supportive measures during the cancer treatment. In our hospital, pharmacists collaborate with nurses and physicians on the pediatric ward as active members of the Amagaski-Pediatric Advanced Care Team (A-PACT). We recently encountered a 3-year-old girl with DS who developed intracranial yolk sac tumor. An initial chemotherapy with cisplatin and etoposide was successful, but she developed severe treatment-related gastrointestinal (GI) toxicity such as vomiting, constipation and abdominal distension. The bowl symptoms were mostly intractable to series of conventional measures including elementary formula, magnesium oxide and sodium picosulfate hydrate. This situation threatened the continuation of the following chemotherapy. In fact, a Daikenchuto has been preferentially prescribed in the surgical GI complications, the patient was placed thereon, with an excellent therapeutic response. We would therefore suggest that the herbal medicines may be added to the battery of supplementary measure for the treatment-related GI toxicity. We also believe that our multidisciplinary team is potentiated to contribute to the quality of life of pediatric cancer patients.