Preparation with Oral Tablets of Sodium Phosphate (Visiclear®) Is Suitable for Colonoscopy but Not for Colonoscopy with Upper Endoscopy

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Dear Sir,

A 70-year-old man underwent colonoscopy and upper endoscopy for screening. Before the procedures, 50 tablets of sodium phosphate (Visiclear®), an appropriate quantity, were prescribed as intestinal tract pretreatment for the colonoscopy, which was performed without any problem. On the other hand, the upper endoscopy demonstrated a poor visual record because a large quantity of cellulose existed in the stomach (fig. 1).

Polyethylene glycol and magnesium citrate are currently used for intestinal tract pretreatment. These intestinal tract pretreatment medicines have to be dissolved in a large volume of water, and do not taste good with the result that sometimes patients experience nausea and vomiting when taking the mixture, and cannot take an adequate amount. Visiclear is the only tablet medicine for intestinal tract pre-

treatment in Japan. Visiclear can be taken with water or tea, there is not a problem with the taste, and the number of tablets to be taken for each colonoscopy procedure can be fractionated into ten doses. This is believed to lessen the burden on the patient. However, there is a problem that cellulose, the chief ingredient of Visiclear, remains in the large intestine during the colonoscopy. Cellulose, molecular formula $(C_6H_{10}O_5)_n$, is a carbohydrate (polysaccharide) and is contained as an additive in Visiclear. Cellulose shows strong resistance to both acids and bases, and removing cellulose is very difficult. In upper endoscopy with colonoscopy, cellulose remained in the stomach thus making observation of the stomach difficult. Our findings suggest that Visiclear is not suitable for colonoscopy with upper endoscopy.

Fig. 1. A large amount of cellulose remaining in the stomach.