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A case of severe diarrhea caused by acupoint injection of Mingzusanli in Singapore

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ABSTRACT

A 63 year old female patient received oral administration of various drugs to promote digestion and gastrointestinal peristalsis due to multiple days of abdominal distension and poor appetite, but the effect was not satisfactory. Afterwards, bilateral Zusanli acupoints were intramuscularly injected with neostigmine mesylate injection (0.5mg on each side). From the afternoon of the medication day to the afternoon of the second day, diarrhea occurred 7-8 times, accompanied by mild abdominal pain. Discontinue the medication and take orally the Bacillus subtilis combination viable capsule, Bladder's yeast powder to regulate intestinal microbiota, and montmorillonite powder to stop diarrhea. At the same time, provide nutritional support and fluid replacement treatment with total parenteral nutrition. On the evening of the second day after medication, the patient no longer had diarrhea.

Keywords: neostigmine; diarrhea; zusanli

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The patient, a 63-year-old female, had intermittent fever with poor appetite for more than 1 month, nausea and vomiting for 4 days. He was admitted to the Department of Nephrology of our hospital on August 15, 2023. Laboratory examination: total protein 69.80g/L, albumin 45.4g/L, creatinine: 260.3umol/L, urea 7.23mmol/L, electrolyte no abnormal, glycosylated hemoglobin 7.1%, white blood cells $3.99 \times 10^9/L$, hemoglobin 7g/L, platelets $182 \times 10^9/L$. No history of food or drug allergy.

Physical examination: T36.9°C, P112 times/

min, R20 times/min, BP126/90mmHg. Clear mind, cooperative physical examination, no pallor conjunctiva, clear respiratory sound in both lungs, no hearing of dry and wet rales. Admission diagnosis: 1. Acute kidney injury (?); 2. Patients with moderate anemia were admitted to hospital to actively search for the cause of the disease. At the same time, they were given 10g of urine Duqing granule 3 times a day, 4 tablets of Baling tablet 3 times a day, oral administration to improve renal function, metoclopramide hydrochloride injection 10mg

intravenous injection of st, esomeprazole sodium for injection 40mg intravenous injection of qd. Vitamin B6 injection 0.1g+15% potassium chloride injection 1.5g+ compound amino acid injection 18AA-V-SF 500mL intravenous infusion of qd for acid inhibition, antiemesis, nutritional support treatment, the patient's poor appetite, upper abdominal fullness still not relieved. On the morning of September 11, 2023, two sides were injected with the injection of nesmine methsulfate in Zusanli (Zhejiang Xianji Pharmaceutical Co., LTD., 1ml:0.5mg, lot number ED2301), 0.5mg st on each side, from the afternoon of September 11, 2023 to the afternoon of September 12, 2023, the patient had 7-8 times of diarrhea, accompanied by slight abdominal pain. Oral subtilis double live bacteria capsule, yeast burra powder to regulate intestinal flora and montmorillonite powder to stop diarrhea, intravenous total parenteral nutrition support and rehydration treatment. Since the night of September 12, 2023, the patient no longer has diarrhea.

discuss

1. Correlation analysis of adverse reactions

The patient in this case did not have diarrhea before taking neostigmine methosulfate injection, the drugs and food used before and after diarrhea did not change, and denied the history of drug and food allergy. There was a clear correlation between the time of severe diarrhea and the time of medication. The adverse reactions listed in the instructions of Neostigmine metilsulfate injection are as follows: large doses can cause nausea, vomiting, diarrhea, and abdominal pain, but rarely cause severe diarrhea. Diarrhea was associated with the injection of neostigmine metilsulfate at both Zusanli acupoints.

Routine intramuscular injection of neostigmine methsulfate in patients with severe

abdominal distension has no obvious effect [3]. Studies have confirmed that the treatment of 0.5 mg of neo-stigmine methosulfate injected at Zusanli point can significantly reduce blood lactic acid level, abdominal pressure, SIRS score, MODS score, TCM syndrome score and intestinal dysfunction score, significantly advance the exhaust time, and reduce mortality [4]. Zusanli point is the key acupoint for the treatment of abdominal distention, which is located at the Weizhu point of Zusyangming. It has the effect of regulating qi and lowering the reverse, fuzheng and dispelling evil. The method of injecting neosmin methionate injection at acupoints can improve the treatment effect of abdominal distention. Based on the theory of Zang-fu meridians, Mingzusanli acupoint injection can enhance the excitation conduction of acupoints, stimulate the synergistic effect of drugs and meridians, and contribute to the recovery of gastrointestinal function [5-6]. Studies have shown that the effect of Neostigmine on gastrointestinal smooth muscle is mainly achieved by increasing the frequency and strength of gastrointestinal peristalsis, and the injection of neostigmine at Zusanli acupoint can promote the recovery of gastrointestinal function in patients [7].

2. Cause analysis of adverse reactions

In several [8-9] clinical observations on the treatment of refractory abdominal distension by neostigmine metilsulfate injection at Zusanli acupoint, no adverse reactions were found. The occurrence of severe diarrhea in this patient may be related to the use of acupoint injection and the direct action of drugs on acupoints, which on the one hand can activate the channels and collaterals, and on the other hand can reduce the threshold value of nerve cell excitation and improve the therapeutic effect [10]. It may also be related to patient-specific constitution. It

may also be that the patient has not reached the severity of refractory abdominal distension, so neostigmine metilsulfate injection at Zusanli point is recommended for refractory abdominal distension and urinary retention in clinic [11].

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