
Poster

[P25-3] P25-3: Anti-infective drugs (3): TB drugs

Chair: Masahiro Kobayashi, Japan

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[P25-3-4] A case report of rifampicin content in a red bezoar, which was found in a patient who took rifampicin for the treatment of pulmonary mycobacterium avium complex

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Background

The formation of a bezoar in the gastrointestinal tract may cause digestive disorders such as anoxia, vomiting and even blockage. The formation is linked to four types of substances; food, hair, drugs and dairy products. When the bezoar is due to an accumulation of a drug, mechanical disruption needs to be performed with care to avoid excessive drug absorption and possible drug toxicity.

Methods

A 64-year-old female was admitted with sudden onset abdominal pain in October 2012. She had a history of gastric cancer and had received a partial gastrectomy in 2003. She had been receiving rifampicin, clarithromycin and ethambutol for *Mycobacterium avium* complex since 2005. A large bezoar, which was dark red in color, was found by endoscopic examination. The bezoar was removed surgically. Four small samples were collected from the rim and the center. Those samples were analyzed by infrared (IR) spectroscopy at an outsourcing laboratory, and the rifampicin content was measured using high performance liquid chromatography (HPLC) at our hospital. After three month later from the operation, under informed consent and with written agreement, the patient's plasma rifampicin concentration was measured after administration of 450 mg of rifampicin.

Results

The IR profiles of the samples taken from the rim were indicative of rifampicin and the samples from the center were deemed to be tannin. The rifampicin content measured by HPLC was 0.05 w/w% for the sample at the rim; the antibiotic was not detected in the sample from the center. The patient's plasma rifampicin concentration was higher than the reported data as specified in drug information data sheet. This result suggested that a significant amount of rifampicin had been absorbed from the digestive tract after surgery. Because the color of rifampicin is deep red, it was first necessary to perform chemical analysis to check the rifampicin content.

Conclusions

When it is suspected that a bezoar contains a medicinal drug, the composition should be ascertained before a treatment decision is taken as this may avoid unpredictable drug absorption and potential drug intoxication.