中文題目：大腸白黴菌感染導致大量下消化道出血之案例 – 案例報告

英文題目：Colonic Mucormycosis Causing Massive Lower Gastrointestinal Bleeding in a ketoacidosis patient

作　　者：李奕瑋[1]，唐瑞祥[2]，張君照[2,3]，高治圻[1]，方冠傑[1,2]

服務單位：[1]臺北醫學大學附設醫院內科部，[2]臺北醫學大學附設醫院內科部腸胃內科，[3]臺北醫學大學醫學院醫學系腸胃內科

Background:

Mucormycosis is one of the rare but life-threatening opportunistic invasive fungal infections, which particularly occurs in immunocompromised patients, particularly in diabetes and malignancy. Few cases of gastrointestinal(GI) mucormycosis has been recorded, while intestine was far less reported than gastric infection. We describe a critical case of acute massive intestinal bleeding due to mucormycosis infection. Here, we presented the first reported case of colonic mucormycosis causing massive lower GI bleeding in a ketoacidosis patient.

Case:

A 28-year-old man was admitted to the intensive care unit because of diabetes ketoacidosis and septic shock. He had poor-controlled Type I diabetes mellitus(DM) with several times of hospitalizations due to diabetes ketoacidosis (DKA), heavy chronic alcohol abuse for 8 years, and refractory chronic pancreatitis.

During hospitalization, massive hematochezia of 1500ml was noted at day 11. We stabilized the patient's vital sign initially and colonoscopy was performed to find the bleeder. Despite numerous blood clots and mushy stool due to inadequate bowel preparation, a deep ulcer covered with mucus with peripheral elevation was noted at the transverse colon . Histopathology of the biopsy revealed nonpigmented, wide (5-20 μm in diameter), thin-walled, ribbon-like hyphae with few septations and right-angle branching suggestive of mucormycosis demonstrated by PAS stain. The patient was immediately treated with oral Posaconazole therapy. Stop hematochezia was observed after starting the treatment. He received a total of 2 months of Posaconazole therapy. A follow-up colonoscopy was done post treatment one month and no lesion and clean lumen was visualized.

Discussion:

Mucormycosis is one of the life-threatening opportunistic invasive infections caused by fungal agents within the order *Mucorales***.** According to one study, most common comorbidity (36%) was diabetes, including type 1 and type 2; second common one was malignancy(17%). Primary gastrointestinal infection accounts for only 7% of all infected cases, but high mortality rate(85%) was caused by perforation and bleeding. Few intestinal infection has been reported,comparing gastric infection.

The diagnosis of mucormycosis is difficult, especially in gastro-intestinal system, and treatment should start as early as possible in order to decrease mortality. There was still no consensus about diagnostic strategy in gastrointestinal mucormycosis infection, not to mention the endoscopy finding was rarely reported.

According to the previous research, this patient was in the high risk of fungal infection due to immunocompromised and type 1 DM, especially with complication such as DKA. As soon as massive bloody stool present, the colonscopy was performed for high risk of intestinal ulcer due to binge drinking. Under endoscopy, the disseminated ulcers were located over colon, which was not specific to common disease, example for UC or intestinal tuberculosis. The diagnose couldn't be confirmed until the pathology was done.

Conclusion:

We were the first to present a colonic mucormycosis in a type 1 diabetic man. This is also a rare case of massive GI hemorrhage caused by mucormycosis of the GI tract in an immunocompromised individual. With an extremely high mortality rate and a definite diagnosis via histopathological evidence, early clinical diagnosis and effective treatment of mucormycosis becomes particularly critical and lifesaving.