The etiology of GI disorders following transplantation is not well understood. Because of enteroenterocyte dependency for de novo purine synthesis MMF exposure could thus restrict the ability of intestinal epithelial cells to maintain normal barrier function, or decrease their capacity to recover from damage. Our patient has experienced a life threatening, severe lower GI bleeding which reoccurred within 2 days upon initial stabilization while on a stable immunosuppressive regimen. Upon dose reduction, the bleeding had stopped, indicating the possible adverse effect of MMF.

A database from the United States Food and Drug Administration’s (US FDA) Adverse Event Reporting System (AERS), containing more than 4,000,000 adverse events reported between 2004 and 2011, has a record of 9 cases of haematochezia (0.02%) associated with MMF treatment (www.drugcite.com; accessed Feb 1, 2012).

We have reported this case to the Croatian National Drug Agency and in feedback letter have been informed that it is a serious, unexpected adverse drug reaction, possibly associated with MMF treatment. A total of 16 cases have been reported to the WHO Adverse Drug Reaction Monitoring Center with two fatal outcomes (WHO, UMC VigiBase, 29th November 2011).

Clinicians should be aware of possible, rare, but life threatening, lower GI bleeding associated with MMF treatment in renal transplant patients. Special caution should be given to patients with digestive system disease even if asymptomatic.

Conflict of interest
The authors declare that there is no conflict of interest associated with this manuscript.

Two renal biopsies were performed because of persistent proteinuria, however, there was no remarkable histologically changes. She was diagnosed with IGS in the light of this clinical picture. Anemia and neurological symptoms were improved with vitamin B12 therapy in the next few weeks. Mild proteinuria remains persist with normal kidney function and she is being still followed-up with periodically for proteinuria.

IGS was firstly described in 1960 by Olga Imerslund and more than 300 cases have been published to date. In IGS, vitamin $B_{12}$ is completely abolished and if untreated with parenteral therapy the disease is fatal. A recent study revealed a biallelic mutation either in cubulin or amnionless. Blood factors act as a receptor for intrinsic factor vitamin $B_{12}$-cobalamin complexes as well as cubulin is an albumin binding protein important for renal tubular albumin re-absorption. Because of absence of glomerular damage in kidney biopsies progressive kidney disease is not usual. Broch et al enrolled 14 patients to a long term follow-up study and exhibited no deterioration in kidney function. Limited numbers of cases have been observed almost 50 years and renal prognosis is excellent. We aimed to announce our case with IGS who has a good renal prognosis over 20 years follow-up.

**Conflict of interest**

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**Adverse reaction to intravenous iron: hypersensitivity or secondary side effect?**


**To the Editor:**

The replacement of iron is necessary in patients on haemodialysis due to the chronic blood loss that occurs when this technique is employed. The intravenous administration of iron is not, however, free from adverse effects. Amongst these, we distinguish certain predictable reactions (an undesired consequence of the pharmacological actions of iron, such as side effects) from unpredictable reactions (in subjects with sensitivity of the immune system or susceptible to reactions such as hypersensitive and anaphylactoid reactions). The latter are less common and more serious, and may require suspension of the drug. We describe the case of an adverse reaction to the intravenous administration of iron that manifested as a burning sensation of the tongue, an inadequately defined sensation of peribuccal hyperaesthesia and generalised pruritus.

The patient is a 42-year-old woman who began a haemodialysis programme by right jugular tunnelled catheter following bilateral nephrectomy due to hypernephroma. In the post-operative period, the patient required a transfusion of 2 units of packed red blood cells. Ten days later a test showed: haemoglobin: 9.6g/dl; haematocrit 28.4, mean corpuscular volume: 87.1fl; iron: 56µg/dl; ferritin 233ng/ml; transferrin saturation index: 18%; folic acid: 22ng/ml vitamin $B_{12}$; C-reactive protein: <5mg/l; Kt/V: 1.7.

She was treated with omeprazole, vitamin $B$ complex, folic acid and 30µg of darbepoetin weekly. 100mg of iron sucrose (Venofer®) was administered intravenously an hour after haemodialysis. 15 minutes after starting infusion, the patient complained of generalised pruritus, a burning sensation of the tongue and peribuccal hyperaesthesia. Physical examination: blood pressure 100/60mmHg, heart and lung auscultation normal, no lesions of the skin. Iron administration was discontinued and the symptoms gradually disappeared. In the following attempt, the patient was premedicated with dexchlorpheniramine and paracetamol. The reaction was identical and also it occurred with ferric carboxymaltose (Ferinject®). The Allergology Service was consulted: the patch test was negative for both iron preparations; the episode was compatible with the side effect. Clinical manifestations reappeared in a weaker form with the successive administrations of iron without major implications.

The rate of adverse effects associated with the administration of various preparations of intravenous iron (high and low molecular weight iron dextran, ferrous gluconate, iron sucrose) is approximately 38 per million. The pruritus associated with ferric carboxymaltose is de-