LETTER TO EDITOR

The outcome of second-look GI endoscopy in persistent gut GVHD post allogeneic stem cell transplantation

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Graft-versus-host disease (GVHD) is the most frequent complication after allogeneic hematopoietic cell transplantation (HCT) [1]. It is a complex disease resulting from donor T-cell recognition of a genetically disparate recipient that is unable to reject donor cells after allogeneic HSCT [2]. The incidence of acute GVHD (aGVHD) is 10–80%, depending upon the risk factors present [3].

The gastrointestinal (GI) tract is the second most commonly involved organ in acute GVHD, with up to 50% of patients who develop GVHD exhibiting GI involvement. Nausea, watery diarrhea, loss of appetite, bloody or mucoid stools, and abdominal pain are the primary manifestations of GI GVHD. However, these symptoms and signs are also often seen in other GI diseases that may occur at the same time, including drug toxicity and enteric infections. Some of this differential diagnosis can mimic histological GVHD [4].

Standard treatment for aGVHD consists of corticosteroids, although there is a lack of consensus over optimal dosing and schedule. Response to corticosteroids is seen in approximately 50% of patients, and those who fail initial therapy have high mortality rates [5]. The management of steroid-refractory GVHD is difficult and involves the use of highly immunosuppressive medications. Such steroid resistance may be due to therapy failure, destruction of intestinal mucosa and/or the coexistence of intestinal infection [4].

Given that other differential diagnosis or coexistent pathology require different management programs and may prove conflicting, the initial diagnosis needs to be confirmed again before proceeding to further highly toxic medication. We hypothesize that if the patient fails first line therapy, endoscopy and biopsy need to be repeated in order to re-evaluate the underlying causes for persistent symptoms.

To evaluate this hypothesis, we conducted a retrospective single center study where we reviewed the charts and electronic records of 200 patients who developed GI GVHD and were treated between 1984 and 2013. We looked at those who had at least two endoscopic evaluations with repeated biopsy for refractory GI GVHD. A total of 20 patients had two endoscopic studies each, and all of them were initially diagnosed as acute GI GVHD with various grades. However, in the second endoscopy, six out of the 20 patients (30%) were found to have concomitant CMV colitis, which led to changes in management plans.

Our result supports that of Martı́nez et al [4] whose study retrospectively evaluated 31 patients with persistent diarrhea who underwent more than one endoscopic study. In 22 of 31 patients (71%), Martı́nez et al. found that the histological findings of the second/third endoscopic biopsies differed from the findings of the first endoscopy and led to a therapy change in 77%. The results of both our study

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and theirs suggest that serial GI endoscopies can be of reliable diagnostic value and can have an impact on therapeutic decision-making for patients with persistent diarrhea after allo-SCT.

Both studies support the hypothesis that dynamic and serial diagnostic follow up would be optimal, and that this is sorely needed for patients who require further immunosuppressive therapy.

We have initiated a prospective study to evaluate all refractory gut GVHD patients with second endoscopies and tissue biopsies to further evaluate this hypothesis.

Conflict on interest

This statement is to certify that all authors have seen and approved the submitted manuscript. All authors have no financial or personal relationships with other people or organizations that could inappropriately influence their work.

References