Partial splenic embolization versus splenectomy for the management of autoimmune hemolytic anemia: A response

Otoimmün hemolitik anemi tedavisinde splenektomiye karşılık kısmi splenik embolizasyon: Bir yanıt

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To the Editor,

I read with great interest the recent publication by Tanrıöver et al. on splenic artery embolization, in which they reached in conclusion that splenic artery embolization might be an option for hemolytic anemia as a bridging therapy to surgery or as an alternative therapy, especially in critically ill patients with disorders that contraindicate surgery [1]. Partial splenic embolization (PSE) is a non-surgical procedure developed to treat hypersplenism as a result of hepatic disease and thus avoid the disadvantages of splenectomy [2]. Furthermore, splenic artery embolisation has been used to treat various conditions, which include chronic idiopathic thrombocytopenic purpura, hereditary spherocytosis, and also splenic trauma in haemodynamically unstable patients. PSE provides a minimally invasive alternative to splenectomy in patients who are severely compromised because of splenomegaly or sequestration and destroying in the spleen. But, it should not be forgotten that this procedure is not innocent. There are severe numerous complications of this method such as post infarction syndrome (fever, left upper quadrant pain, risk of infection and abscess formation), and embolization are related to migration or inappropriate placement of embolic material [3,4]. These are the most dangerous and lethal complications of the procedure. One of the other serious potential complications associated with pulmonary disorders. Pneumonia, atelectasis, and pleural effusion, usually develop in the left lung and are associated with embolization of the upper pole of the spleen. Splenic abscesses, rupture of the spleen, and septicemia, have been previously reported after PSE [5]. Decreased portal-vein flow and a rapid increase in the platelet count after PSE may induce portal-vein thrombosis [2]. Moreover, the extent of embolization seems to be critical for longterm efficacy of PSE. Embolization of less than 50% of the splenic mass was almost always associated with a relapse of hypersplenism or continuation of splenic activity [5].

Splenectomy can safely be performed laparoscopically in almost all cases of primary autoimmune

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doi:10.5152/tjh.2011.71

hemolytic anemia (AIHA), because the spleen is usually of normal size [6]. In second-line treatment, medical reasons in favor of rituximab are relative contraindications for splenectomy such as massive obesity, technical problems, and a high risk of venous thromboembolism. A contraindication to rituximab treatment is an untreated hepatitis B virus infection. Additionally; intravenous immune globulin is not recommended for routine use in either acute or chronic treatment of AIHA. Based on consensus by the expert panel, IVIG may be considered among the options for treatment of severe life-threatening AIHA [7].

I propose that the process performed by Tanrıöver et al. should be applied only in selected patients with a very low preoperative level of hemoglobin and not susceptible to any hematologic and surgical conservative treatment. Therefore; splenic artery embolisation preceding laparoscopic splenectomy should not be carried out routinely as appropriate use of blood products and correct surgical technique will be adequate in controlling blood loss.

Conflict of interest statement

Author of this paper has no conflict of interest, including specific financial interests, relationships, and/or affiliations relevant to the subject matter or materials included in this manuscript.

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Author Reply

Thank you for your comments and contribution. Complications of splenic artery embolization have been very briefly discussed in this paper due to word count limitations. Indeed, all of the serious adverse events and complications that you have mentioned are to be considered while deciding to proceed with splenic artery embolization. The case patient had hemoglobin values as low as 1.4 g dL^{-1} and no compatible erythrocyte suspension could be obtained for several days, which lead the surgeons abstain from surgery. Intravenous immune globulin was also administered because of this critical situation of the patient. Critical patients require critical, immediate and sometimes brave decisions in the intensive care unit. We think that splenic artery embolization was the right decision regarding the challenges of the patient presented. Morever, bleeding could not be controlled during splenectomy which led to a fatal hypovolemic shock, making us think what would happen if the patient had not undergone surgery. We pointed out that “it might be a valuable option” for selected cases, but of course should not be the first line treatment for uncomplicated, low risk patients who are suitable for surgery.

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