

# **Fibrin glue therapy for severe hemorrhagic cystitis after allogeneic hematopoietic stem cell transplantation.**

Authors: Tirindelli M.C., Flammia G.P., Bove P., Cerretti R., Cudillo L., de Angelis G., Picardi A., Annibali O., Nobile C., Cerchiara E., Dentamaro T., de Fabritiis P., Lanti A., Ferraro A.S., Sergi F., di Piazza F., Avvisati G., Arcese W.

Publication Date: 2014

## **Abstract:**

Hemorrhagic cystitis (HC) occurring after allogeneic transplantation significantly affects quality of life and, in some cases, becomes intractable, increasing the risk of death. To date, its therapy is not established. We used the hemostatic agent fibrin glue (FG) to treat 35 patients with refractory post-transplantation HC. Of 322 adult patients undergoing an allogeneic transplantation for hematological malignancy, 35 developed grade  $\geq 2$  HC refractory to conventional therapy and were treated with FG, diffusely sprayed on bleeding mucosa by an endoscopic applicator. The cumulative incidence of pain discontinuation and complete remission, defined as regression of all symptoms and absence of hematuria, was 100% at 7 days and 83%  $\pm$  7%, respectively, at 50 days from FG application. The 6-month probability of overall survival for all 35 patients and for the 29 in complete remission was 49%  $\pm$  8% and 59%  $\pm$  9%, respectively. In the matched-pair analysis, the 5-year probability of overall survival for the 35 patients with HC and treated with FG was not statistically different from that of the comparative cohort of 35 patients who did not develop HC (32%  $\pm$  9% versus 37%  $\pm$  11%,  $P$  = not significant). FG therapy is a feasible, effective, repeatable, and affordable procedure for treating grade  $\geq 2$  HC after allogeneic transplantation.

Copyright © 2014 American Society for Blood and Marrow Transplantation.