Drug prevents bleeding in hemophiliacs

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An international research team led by Dr. Cindy Leissinger of the Tulane University School of Medicine and Dr. Alessandro Gringeri of the University of Milan found that a drug commonly used to treat bleeding events in people with a type of severe hemophilia also can be used to prevent such events from happening in the first place.



Dr. Cindy Leissinger says it's better to prevent bleeding events in hemophiliac patients than to treat the bleeding after it occurs. (Photo by Kim Rainey)

The study, the first to confirm the efficacy and safety of the drug FEIBA in bleed prevention, is published in the Nov. 3, 2011, issue of *The New England Journal of Medicine*.

The study examined the ability of FEIBA to prevent bleeds in people with severe hemophilia A with inhibitors. People with this condition produce antibodies known as inhibitors. These render ineffective the usual treatment for hemophilia, which involves replacement of the blood-clotting factor (Factor VIII) that is absent in

hemophilia patients.

Approximately 30 percent of patients with severe hemophilia A develop such antibodies and require treatments with alternate forms of clotting factor concentrates, known as bypassing agents. Until recently they needed infusions with clotting factors "on demand" as bleeding episodes occurred.

"Treatment of bleeding events in these patients is not always effective, leading to significant problems for patients, who typically experience repeated joint bleeding and progressive joint disease," says Leissinger.

The study tested if preventive treatment with the bypassing agent FEIBA is safe and effective in preventing joint and other bleeds in hemophilia A patients with inhibitors. Thirty-four patients were enrolled for the 15-month-long study.

Compared to on-demand therapy, FEIBA infused three times per week resulted in an overall reduction of 62 percent in all bleeding events and a 72 percent reduction in target joint bleeding ("target joints" are joints that experience repetitive bleeding). Nearly two-thirds of patients showed a very good response to preventive FEIBA treatment, experiencing an 82 percent reduction in bleeding events.