

Final Report
Intranasal Bevacizumab for HHT-Related Epistaxis
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Lay Summary to be shared on Cure HHT website:

This study investigated the efficacy of bevacizumab (Avastin) injections in reducing nosebleeds associated with hereditary hemorrhagic telangiectasia (HHT) when administered at the time of bipolar electrocautery treatment in the operating room. We aimed to determine if Avastin would 1) decrease the severity and frequency of nosebleeds and 2) increase quality of life in patients who received Avastin with bipolar cautery compared with those who received the inactive saline placebo with bipolar cautery.

Our first finding was that bipolar electrocautery is an effective surgical treatment for management of HHT-related nosebleeds. Patients who underwent bipolar cautery but received the inactive saline placebo still had significant improvement in nosebleed frequency over a 6-month period after surgery.

Our second finding was that a single treatment of Avastin given alongside bipolar electrocautery during surgery was associated with additional reduction of nosebleeds for 1-4 months after surgery, above and beyond the improvement that was expected from the surgery itself. This means that patients who received Avastin were able to notice a greater positive difference in their bleeding symptoms compared with patients who received the saline placebo. The extent of the reduction in nosebleed severity met the criteria for what is considered “clinically significant” in research terminology; however, this difference could not be proven to be “statistically significant” as there were not enough patients included in this study to enable an adequate statistical analysis.

Our last finding was that we did not find any differences in overall quality of life between the patients that received Avastin and the patients that received saline. At the same time, we did not observe any adverse side effects in patients who received Avastin.

Our hope is that these encouraging findings will serve as the seed for a larger clinical trial that will validate the findings of this pilot study.

On behalf of the Stanford Sinus Center and HHT Center of Excellence at Stanford, we would like to extend our deepest appreciation to Cure HHT for its grant support for this trial, and we would especially like to thank the many patients who traveled from great distances to participate in this trial.

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