

**HEREDITY AND HAIR LOSS:
NEW RESEARCH DIRECTIONS WITH TWINS**

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Twinship offers an opportunity for scientific studies not possible in routine evaluation methods. This phenomenon is clearly demonstrated in a new study now being conducted at our dermatology clinic in the United States. The study's objective is to determine whether in identical twin males with Male Pattern Hair Loss (MPHL) -the treatment of one twin with PROPECIA™ 1mg (finasteride), compared to placebo in the other twin, will result in improvement as measured by global photographic assessment.

This unique trial, conducted as a double-blind, randomized, placebo-controlled study, will not only give us a chance to look at the effectiveness of the medication in the twin taking it, but will also allow us to observe through the other twin what would have happened if he had not taken the drug. In other words, the study-involving nine identical twins -will have the effect of each twin serving as his own control.

The onset and extent of MPHL are thought to be under genetic control. Identical twins have the same genetic profile. As such, the presence, onset, pattern, and extent of male pattern hair loss should be the same for each twin in a pair. Through the mirror image of themselves, therefore, the twin participants can see where they are in reality one year after taking action to address their hair loss, as well as where they would have been if they had done nothing.

The competitiveness we have observed so far in the twins in our US study is quite surprising. We did not see this as an issue when designing the study, but some participating twins talk to each other two to three times a day about their concerns over whether they are receiving the drug or not.

Clearly, identical twins are acutely aware of who has lost more hair. If one is thinning, it is obvious. What becomes even more apparent to them is that hair loss continues to progress unless it is treated.

Typically, a man can lose about 50% of his hair before he notices it —the so-called 50% value. This can be a cause of concern for many men, but the sooner

they notice hair loss, the sooner they'll get help and the more likely treatment will be effective.

With men, losing hair can be perceived as a loss of identity. I believe people falsely attribute this to vanity. If a man wants to change his body into one he never had, that's different. A man who is accustomed to seeing himself a certain way and suddenly no longer looks the same; he is losing his self-identity. A man struggles with hair loss because when it is gone, he no longer recognizes himself as the man he has been for the last 20, 30, or 40 years.

This concept comes to life when you deal with twins –the one *on* the medication is closer to the familiar identity. We may even find as the study progresses that twins' psyches won't allow them to stay in the study because of fraternal competition.

Overall, we believe the twinship study of hair loss will add an important new dimension to the science of MPHL, because it will examine the theoretical ability for twins to look into the mirror and see themselves in the future with or without medication to address their hair loss. It will provide additional clinical evidence of the importance for men to be aware of their family history and degree of risk for MPHL and seek professional help earlier.