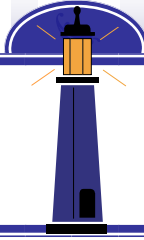


PHAROS



SPOTLIGHT

This newsletter is dedicated to our PHAROS participants and their families.



Volume 8

June 2008

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PHAROS... A Roadmap to the Future for HD

Dear PHAROS Participants,

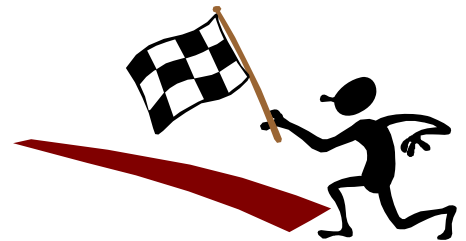
We are heading for the home stretch! The NIH has provided funding for three more years to complete the collection of valuable information about your participation in PHAROS. All study visits will need to be completed by December 2009. As PHAROS draws to a close your follow-up appointments are critical to the PHAROS researchers as they gain valuable insight into people at risk for Huntington Disease. We hope we can count on your continued participation. This is also an important time to look at and share the information we learn about PHAROS with you. We are mindful of your dedication and eagerness to hear the outcomes of the study. We will keep you informed of any publications through your research site.

We look forward to the next years of completing the PHAROS visits. However, participation in research need not stop with PHAROS, other research opportunities are available to PHAROS participants. Please discuss all research options with your site investigator and coordinator.

Sincerely,

*Ira Shoulson, MD
Principal Investigator*

*Anne B. Young, MD, PhD
Co-Principal Investigator*



As PHAROS draws to a close your follow-up appointments become even more important.

PHAROS Spotlight Newsletters
can be found online at:
[http://www.huntington-study-group.org/
PHAROSNewsletterVolumes.htm](http://www.huntington-study-group.org/PHAROSNewsletterVolumes.htm)



Genetic Information Nondiscrimination Act (GINA)

On Thursday, May 1, 2008 The House passed the Genetic Information Nondiscrimination Act of 2008 (GINA) by a vote of 414 to 1. The bill was signed by president Bush on Thursday, May 22, 2008. GINA will protect individuals against discrimination based on their genetic information when it comes to health insurance and employment. These protections are intended to encourage Americans to take advantage of genetic testing as part of their medical care.

This long-awaited measure which has been in debate for 13 years, will pave the way for people to take full advantage of the promise of personalized medicine without

fear of discrimination. There are over 1,000 genetic tests available today. GINA supporters believe that this act will encourage people to take advantage of these tests to diagnose and assess diseases and risk of disease with the

added fear of losing their jobs or being denied health coverage for doing so.

“Ninety-three percent of Americans surveyed about genetic testing said an employer should not be allowed to use genetic information to make decisions about hiring or promoting a person and that a health insurer should not be allowed to use genetic information



to deny insurance or charge higher prices. This bill could just as well be known as the bill to protect people with DNA, and that would be all of us! Since each of us

has dozens of genetic variations that may put us at risk for disease, we all would have had a reason to be concerned about the possible misuse of genetic information. With this act, Americans won't have to worry about their jobs or their health insurance being taken away because of the genes they inherited.”

“This bill could just as well be known as the bill to protect people with DNA, and that would be all of us!”

Statement from Francis S. Collins, M.D., Ph.D., Director, National Human Genome Research Institute, National Institutes of Health, Department of Health and Human Services



Recent Publications

Dr. Ray Dorsey at the University of Rochester recently presented results generated by exploring data collected from the PHAROS study at the HD Symposium in Boston, MA.

Influence of Insurance on the Decision to Pursue Genetic Testing in Individuals at Risk for Huntington Disease

Oster E, Dorsey ER, Bausch J, Shinaman A, Kayson E, Oakes D, Shoulson I, Quaid K, and the Huntington Study Group PHAROS Investigators

Background and Aim

The frequency of genetic testing among individuals at risk for Huntington Disease (HD) is low despite potential advantages to knowing one’s HD gene status. We aimed to explore concerns about health insurance and genetic testing and evaluate factors associated with the eventual pursuit of testing in a longitudinal observational study of asymptomatic individuals at risk for HD (PHAROS).

Methods

We used PHAROS data to explore the reasons cited for lack of genetic testing at enrollment in the study. We also compared the pre-testing survey responses of those that pursued testing to those who did not.

Results

All 1001 individuals enrolled in PHAROS had some data available at enrollment. At baseline, 54% of those enrolled report that fear of insurance loss was either a “somewhat” or “extremely” important factor in their decision not to pursue genetic testing thus far. Only 13% ranked this factor as an “extremely unimportant” reason for not testing. Relative to individuals who did not pursue testing, those who did were concerned about losing health insurance (p<0.01). Individuals who eventually pursued testing were also significantly more likely to have paid out of pocket for (cont p.3)



Results (continued from pg. 2)

insurance costs to avoid revealing their genetic risk (20% versus 3%, $p < 0.001$). Items paid for out-of-pocket were principally baseline screening for neurological problems and pre-implantation genetic diagnosis.

Figure 1. Importance of Insurance Loss to Testing Decisions

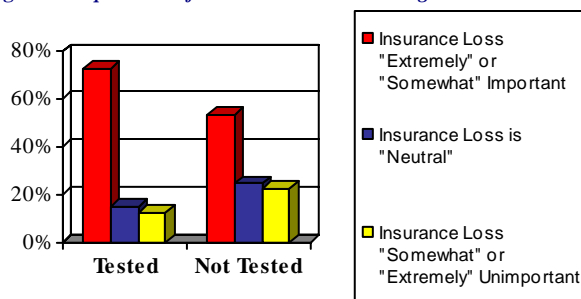
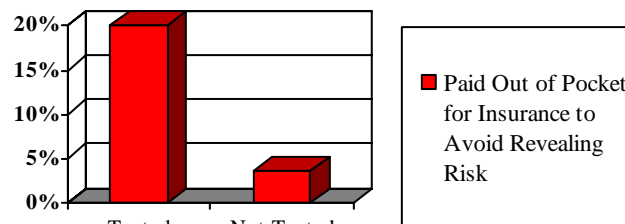


Figure 2. Payment Out of Pocket for Insurance Costs



Conclusions

Fear of insurance loss is a major concern for individuals at risk for HD who pursued genetic testing. Paying health care expenses out of pocket to avoid revealing risk status is a reality for a significant fraction of people at risk.



The PREDICT-HD study currently has 1000 participants. This article, published in the online *Journal of Neurology, Neurosurgery and Psychiatry* in December 2007, was based on information from baseline visits and included 438 study participants.

J S Paulsen, D R Langbehn, J C Stout, E Aylward, C A Ross, M Nance, M Guttman, S Johnson, M McDonald, L J Beglinger, K Duff, E Kayson, K Biglan, I Shoulson, D, Oakes and M Hayden

J. Neurol. Neurosurg. Psychiatry published online 20 Dec 2007

Detection of Huntington's disease decades before diagnosis: The Predict HD study.

The PREDICT-HD study includes healthy men and women at risk for HD, who have been tested for the HD gene mutation. The PREDICT-HD study uses a variety of tests to examine the nature and pattern of neurobiological changes and neurobehavioral changes that occur in the period of time leading up to a diagnosis of HD. The objective of the study is to learn more about initial changes that occur in thinking skills, emotional regulation, brain structure and



Results show that the estimated time to an HD diagnosis is related to certain clinical and neuroimaging

also brain function as a person transitions from health to HD. The goal of the PREDICT-HD study is to identify these changes before a diagnosis of HD is made. Using clinical assessment methods such as tests that measure general thinking abilities, movement capabilities, memory and odor recognition, and also MRI scans that show highly sensitive pictures of the brain, the changes can be analyzed in depth. The predicted time to clinical diagnosis was esti-

mated by looking at the CAG repeat length (level of gene mutation) and current age. Current results of this study show that a person's estimated time to an HD diagnosis was most related to clinical and neuroimaging markers (MRI scans). The patterns of association suggest the start of detectable changes one to two decades before the predicted time of clinical diagnosis. These findings propose an approximate timescale of measurable disease development, and suggest candidate disease markers for use in future preventive HD trials.



The longer you participate in PHAROS the more valuable you and your data become to future planning of HD research studies.



HSG Study Updates

2-CARE: Coenzyme Q10 in Huntington's Disease.

... Recruitment for 2-CARE is in progress...

The HSG is funded to conduct a definitive phase III clinical trial of high dose coenzyme Q10 (CoQ) in Huntington disease (HD). The HSG-run CARE-HD study (led by Dr. Merit Cudkowicz and Dr. Michael McDermott) demonstrated evidence that CoQ might have a potential benefit in slowing the decline of functional capacity in HD. We therefore began the important process to determine the best dosage, obtain funding and obtain FDA approval to conduct a definitive clinical study. Please continue to visit the HSG web site for further developments as we get closer to starting this exciting new study.



CREST-E: Creatine Safety, Tolerability, & Efficacy in Huntington's Disease

... Recruitment for CREST-E will begin in 2008...

This trial will test the safety, tolerability and efficacy of creatine in persons with HD and is scheduled to move ahead. As of November 2007, funding has been secured from the National Center for Complementary and Alternative Medicine (NCCAM) and the FDA Orphan Products Division. Steven Hersch, MD, PhD is the Principal Investigator.



PREDICT: Neurobiological Predictors of Huntington's Disease

... Recruitment for PREDICT is ongoing ...



In September 2001, the Huntington Study Group, under the direction of Jane Paulsen, Principal Investigator (University of Iowa), received funding from the National Institutes of Health (NIH) to study healthy men and women at risk for HD, who have been tested for the HD gene mutation. Eligible individuals must be 18 years of age or older, are able to undergo a MRI and have the commitment of a companion to attend visits or complete surveys via mail.

The PREDICT-HD study uses a variety of tests to examine the nature and pattern of neurobiological changes and neurobehavioral changes that occur in the period leading up to a diagnosis of HD. The intent of the study is to learn more about the beginning changes in thinking skills, emotional regulation, brain structure and brain function as a person begins the transition from health to HD. As of December 3, 2007, the PREDICT-HD study has enrolled 1000 participants. It is our goal to continue to enroll additional participants.



- For more information on eligibility criteria and the
- locations of HSG participating sites in the U.S. and
- Canada, please call the HSG at 1-800-487-7671 or visit
- the HSG website at www.huntington-study-group.org





more HSG Study Updates

COHORT: Cooperative Huntington's Observational Research Trial. A long-term study in individuals who are part of an HD family. ... **Recruitment for COHORT is in progress...**



This long-term observational study will initially take place at 40 North American and Australian Huntington Study Group (HSG) sites. The goal of COHORT is to collect information in order to learn more about HD, potential treatments, and to plan future research studies of experimental drugs aimed at postponing the onset or slowing the progression of HD. This study will recruit both adults and children who have clinically diagnosed HD and adults who are a part of an HD family. Individuals who choose to participate will have one study visit every year for as long as they are able and choose to participate. This study is sponsored by HP Therapeutics Foundation, Inc. If your site is not participating in COHORT at this time and you would like to learn more about the study please call the Huntington Study Group at the toll free number 1-(800)-487-7671 to be directed to a site closest to you.



PREQUEL: Coenzyme Q₁₀ in Pre-manifest Huntington Disease.

...**Recruitment anticipated to start in late 2008...**

The Huntington Study Group (HSG) has been awarded NIH funding for a phase IIb clinical trial of coenzyme Q₁₀ in pre-manifest HD. The PREQUEL study (Study in **PRE**-manifest Huntington's disease of coenzyme **Q₁₀** (**Ubiquinone**) Leading to preventive trials) under the direction of Christopher A. Ross, MD, PhD, Principal Investigator of Johns Hopkins University and Kevin Biglan, MD, MPH, Co-Investigator of University of Rochester will be conducted at 11 U.S. institutions and will enroll 90 pre-manifest HD volunteers for a study period of 20 weeks. This trial will evaluate the safety and tolerability of coenzyme Q₁₀ in three treatment groups (600, 1200 or 2400 mg per day) in pre-manifest HD volunteers.

Please continue to visit the HSG web site for additional information leading up to the implementation of this new study in pre-manifest HD.



RESPOND-HD: An Examination of Responses to Potential Discrimination from Individuals At Risk for Huntington's Disease.

... **Recruitment for RESPOND is completed...**

The RESPOND-HD observational trial is looking at issues of potential discrimination in those affected by Huntington disease (HD). The information gathered in this study will allow researchers to examine the experiences of persons who have undergone genetic testing for HD or those persons who are at risk for HD. RESPOND-HD will seek answers to questions such as "How is knowledge used after genetic testing?", "What experiences occur following genetic testing?" and "Why might outcomes differ in persons undergoing genetic testing?". Study participants from the PHAROS and PREDICT-HD research trials are being recruited for this study. Participants for this international, multi-site study are being recruited from domestic geographical areas where there are differing discrimination laws for employment and insurance, and also from foreign sites where health care systems may be different from domestic sites.



For more information on all studies visit the Huntington Study Group website at: <http://www.huntington-study-group.org> or call the toll free number at 1-800-487-7671.



Upcoming Events



2nd Annual Huntington Disease Clinical Research Symposium

Saturday, November 14, 2008
TradeWinds Island Resort
St. Pete Beach, Florida

17th Annual Huntington's Disease 2008 Triathlon

Sunday, August 3, 2008
Crandon Park (south beach entrance)
4000 Crandon Blvd
Key Biscayne, FL

For more information visit: www.huntingtonsdiseasefl.org/

HDSA Go-Kart Challenge

The HDSA chapters are hosting Go-Kart Challenges across the country! Teams will drive around the Go-Kart track for 2 hours while raising funds for the fight against Huntington's Disease.

Prizes will be awarded to top fund-raisers at each local event, and the overall top fund-raiser will also win a prize.

For more information call the national HDSA office at (800) 345-HDSA (4372).



HeART for Hope Benefit

Thursday, September 11, 2008
65 Water St.
Worcester, Massachusetts

A night of art and wine supporting the Huntington's Disease Society of America
For more information visit: www.dzian.net

Recent Events



23rd Annual Huntington's Disease Society of America (HDSA) Convention

The Huntington's Disease Society of America (HDSA) Convention each year is dedicated to bringing together physicians, researchers, patients and care givers from the HD community, sharing knowledge, expertise, personal experiences and advancements in therapeutic research.

The 23rd Annual convention was held June 6-8 2008, in Pittsburgh. Presentations from the 2008 convention can be found on the HDSA website. <http://www.hdsa.org>.

For More Information...



Huntington Study Group
Call toll free **1-800-487-7671**
<http://www.huntington-study-group.org>

PHAROS Spotlight newsletter online
<http://www.huntington-study-group.org/PHAROSNewsletter-Volumes.htm>

Huntington's Disease Society of America
Call toll free **1-800-345-HDSA (1-800-345-4372)**
<http://www.hdsa.org>

Huntington Society of Canada
Call toll free **1-800-998-7398**
<http://www.hsc-ca.org>

Huntington Project
<http://www.huntingtonproject.org>

International Huntington Association
<http://www.huntington-assoc.com>

The HD Lighthouse
<http://www.hdlighthouse.org>

EURO Huntington's Disease Network
<http://www.euro-hd.net>

National Institute of Health Clinical Trials
<http://clinicaltrials.gov/>

National Institute of Neurological Disorders and Stroke
<http://www.ninds.nih.gov/disorders/huntington/huntington.htm>
National Human Genome Research Institute (NHGRI)
<http://www.genome.gov/>

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