FDC BEAT

www.fdc.to
Newsletter of the Familial Dilated Cardiomyopathy Project at the University of Miami
Miami, FL, USA Volume XIII, Issue 1 March 2012

How Does Participation in the FDC Study Work?

When our research study began in the early 1990s, genetic testing for dilated cardiomyopathy (DCM) was not routinely available. Back then, our research laboratory, with the goal of figuring out the genetic cause of DCM, was one of the few studying genetic material from people with DCM and their families. Today, our research genetic testing continues, but unlike the early days, genetic testing for DCM is now readily available through a doctor's office (clinical genetic testing).

Clinical Genetic Testing is Recommended

Clinical genetic testing, however, can only find the genetic cause in about 30 of every 100 (30%) people with DCM. This means that in 70% of people with DCM who undergo genetic testing, a gene change is present but not detectable by the current testing tools. The reason for this limited detection is because not all gene changes causing DCM have been identified.

And this is when we, the FDC Project, come into the picture. Our goal is to find the genes that are yet to be identified. Furthermore, even if a gene change is identified, the exact way in which these changes lead to disease and how this information can be used in the development of treatments and therapies is unknown. We want to answer these questions.

Because clinical genetic testing is available and can provide results in a given turn-around-time, we recommend that all people with DCM discuss clinical genetic testing with their doctor. We also offer enrollment in our research, even if a disease-causing genetic change has been previously identified by a clinical genetic test.

Research Genetic Testing: How It Works?

For our study, we are interested in people with DCM and their family members, both with and without heart problems. We are also interested in healthy spouses who are married into their family; they help our study as "controls." We realize that for those of you who are enrolled in the study, it is sometimes difficult to explain to relatives how the enrollment process works. This is why in this issue of FDC BEAT we review the research enrollment process, from consenting to what happens after enrollment occurs, to the time that results, if any, are available. In summary, for our study, we need a blood sample, medical records and information from a family/health history interview. Participation can occur on site (in person, in our offices) or off-site (remotely, over the phone). See accompanying figure and follow the steps!

A) Individual hears about the FDC project. This is what we call a referral and can occur when someone finds us online and writes using the "Contact Us" page of our website (www.fdc.to), when a provider recommends participation in our study, when a family members passes on a brochure or sends an email with information about the study, or other source. We are interested in people with DCM, regardless of whether it runs in the family or not. People can contact us directly, or with their permission, providers or family members can share their contact information with us and we do the rest.

B) Initial contact. When contact is initially established, the first conversation between individual and research staff is a brief discussion of what we know about the genetics of FDC, where the research is, our goals, and overall process. During this conversation, we make sure that the person understands the difference between what we do (research genetic testing) and what is done elsewhere (clinical genetic testing), which is recommended for all individuals with DCM and their at risk family members, once a gene change has been identified in the family.

C) Individual is interested in enrolling? If, after the initial conversation (B), the individual is still interested in our study, the consent process begins.

Continued on page 2.

Enrollment...

Continued from page 1

D) Enrollment packet. During the consent process, several forms are completed. This packet contains the informed consent form, HIPAA form, medical records release form, family history questionnaire, and blood drawing kit. If the individual is not in our facility, we mail an enrollment kit with a pre-paid return envelope.

E) Informed consent conversation. After the enrollment packet is reviewed by the individual, research staff and individual have the informed consent conversation. During this conversation, which lasts an average of 30 minutes, the study and forms are reviewed in detail. We ensure that the participant has enrolled free of coercion and that ample time for questions has been allowed. If after this conversation, the individual wants to participate, research staff provides guidance on completing and signing the forms. A family and health history interview follows. For off-site individuals, the informed consent conversation is conducted over the phone.

F) Blood draw. Once the individual has given consent to participate, the next step is a blood draw. This blood draw can occur in our offices, or for off-site individuals, at any willing local doctor's office or blood drawing station. In our experience, doctors and nurses are very helpful in this process. In this case, all the individual has to do is to hand the blood drawing kit and instructions to the provider. If the individual is charged for the blood draw, our study provides reimbursement if a receipt is provided. The consent form outlines a series of additional procedures (skin biopsy, heart tissue donation, cardiovascular screening) that are not required for enrollment in the study. The option of pursuing these additional procedures is presented to subjects on a case by case basis, as their participation in the study proceeds. Participants are always free to decline undergoing these procedures.

G) Materials go to FDC laboratory. If the enrollment occurs on site, research staff takes blood sample and paperwork back to the laboratory. If the participant is off-site, sample and paperwork are placed in the pre-paid envelope provided with the enrollment kit and sent to our office.

H) Review of paperwork and sample. DNA (genetic material) is prepared from the blood sample. All paperwork is reviewed for completion and sample quality is assessed. If the paperwork and sample are complete and appropriate, the individual is officially enrolled in the study. Participation of additional family members is reviewed and records and sample analysis beings as described below, and in the accompanying figure, from steps A1 through D1.

I) Participation of additional family members. FDC staff and participant work together to see if additional family members would like to participate in the FDC Research Project.

Records and Sample Analysis (A1-D1)

A1) Medical records request. We use the release forms in the enrollment packet to request heart related medical records . This can take days or months to complete, depending on the turnaround time of the record request. Medical records must confirm heart size and ejection fraction and for affected people, medical records must confirm that the cause DCM is unknown.

B1) Research genetic testing. Research can only proceed if at least one individual per family is confirmed by medical records to have DCM of unknown cause. Genetic research is done to identify DCM-causing genetic changes. Once a person's sample enters the testing process, testing continues indefinitely until relevant results are obtained. We may not find any result.

C1) Results and notification. Once we have a result that can explain DCM, we test additional family members enrolled in the study to seek further proof that the genetic change identified is disease-causing. By nature, everyone carries dozens of genetic changes that can be neutral or benign (not disease-causing). This is a key aspect to our study. Comparing results from relatives with and without DCM is one of the most valuable research tools that we can use. If, after research genetic studies we have enough evidence to support a genetic change being responsible for DCM, we send a notification of results availability to all consented relatives. While we cannot disclose if any given person carries a genetic change, we do provide written information with as much information as possible so that our research result can be confirmed.

D1) Confirmation of research results. Our results must be confirmed by a laboratory certified by the Clinical Laboratory Improvement Amendments (CLIA) before they can be released to participants. Clinical laboratories require a fresh blood sample and a test request from the person's physician. We will tell the clinical laboratory what to test for in order to confirm our result. Clinical laboratories charge a fee for confirmatory testing, which may be covered by insurance.

As you can see in the figure, there is a start but there is no finish. Our research never ends. As generations go by, new family members are welcome to participate as we continue unraveling the genetics of FDC!

Figure 1. FDC Study Enrollment Flow

Individual contacts FDC Project and staff and individual talk about the research. Individual is reminded that clinical genetic testing should be considered regardless of participation.

B

Individual is interested in enrolling?

C

FDC staff provides individual enrollment packet: informed consent, HIPAA and medical records form, family history questionnaire and blood drawing kit. If off-site, pre-paid return envelope is enclosed.

D

After discussing the informed consent thoroughly, if individual wants to participate, individual signs forms and answers family history/intake health history questions.

For off-site participants, the informed consent conversation is conducted over the phone.

E

Individual gets blood drawn at a place of his/her convenience. This is at no cost to the individual, or reimbursement is provided in full by the FDC Project.

F

Samples and paperwork go to the FDC lab. If offsite, individual sends materials right away in pre-paid envelope.

G

Medical records are requested and reviewed to confirm eligibility criteria.

A1

RECORDS AND SAMPLE ANALYSIS

If participant wishes to receive results, participant gets blood re-drawn and sample is sent to a CLIA certified lab for confirmatory testing. *Note: There is a cost associated with this confirmatory genetic test (this is no longer considered research, but clinical testing).*

D1

FDC staff extract DNA from blood sample, look for genes that may be associated with DCM (this process can take months or years, or there may be no findings).

B1

If a change in gene or genes that might be associated with DCM is found, samples from more family members may be needed to draw stronger conclusions. FDC staff sends a letter to all consented participants informing of availability of results.

C1

FDC staff and participant work together to see if additional family members would like to participate in the FDC Project.

I

If paperwork is complete and sample is received, information is entered in database, sample is stored and **individual is officially enrolled!**

H

START

Individual/family member hears about the FDC Project through: website, provider, brochure, family member, other.

A

FDC BULLETIN BOARD

SEND US YOUR IDEAS!

We are always looking for relevant content to use in our newsletter. Please let us know if you have any ideas for an upcoming issue. Also if you have any questions about the newsletter, we would like to hear from you. As always, you can reach the FDC Project through our website at www.fdc.to or via our toll free number: 1-877-800-3430. Thank you so much for your continued support and participation in this very important research!

HEART TISSUE

If you have advance notice that you will be undergoing a heart transplant, VAD placement, or heart biopsy and would like to give a sample of heart tissue to the FDC Project, please notify us. We will coordinate obtaining a sample of your heart tissue for our study. By volunteering to donate some of your heart tissue, you could be of tremendous help with our effort to identify the gene(s) that cause DCM.

MEDICAL FOLLOW-UP

If anyone in your family is newly diagnosed with heart problems, please let us know. Also, if you or anyone in your family has had heart tests performed, either for follow-up or for the first time, regardless of results, we would be interested in receiving copies. Please contact us and we will send you a medical record release form. If we have sent you medical record release form(s), please send us the completed form(s) as soon as possible.

CONTACT INFORMATION UPDATES

If you have moved and/or have an email address we can contact you at, please call us at 1-877-800-3430 or email us through the "Contact Us" Page on our website: www.fdc.to. This way we can get in touch with you for any follow-up and continue to send you the newsletter.

ADD ME TO THE MAILING LIST

If you are not currently a participant in our study, but would like to receive our newsletter, please contact us with your name and address, and we will be pleased to add you to our mailing list.

FDC BEAT Newsletter

FDC BEAT is a publication of the Familial Dilated Cardiomyopathy Project in the Cardiovascular Division at the University of Miami, Miller School of Medicine in Miami, FL. The newsletter is not copyrighted and readers may photocopy its content to share with family members and health care professionals. We welcome your feedback.

The FDC Project Group
Cardiovascular Division
P.O. Box 019132, C-205
Miami, FL, 33101

66495H

ADDRESS SERVICE REQUESTED

TO: