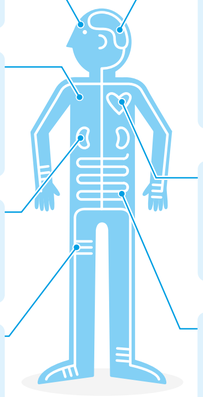
Tear off this letter and give it to your doctor ▶▶▶

What are the symptoms of **Fabry**?

Each person with Fabry may have different symptoms; some of these are shown in the diagram below.



EYES[1]
- A whorled pattern in the eyes which an optician may be able to see
- Fabry cataracts

LUNGS[1]
- Difficulty breathing
- Wheezing
- Dry cough
- Reduced lung function

KIDNEYS[1]
- Protein in the urine
- Decreased kidney function
- Kidney failure

SKIN[1]
- Sweating less than normal or not being able to sweat
- Small dark red spots called angiokeratomas, particularly between belly button and knees

NERVOUS SYSTEM[1,9]
- Pain
- Hearing loss, ringing in the ears
- Intolerance to heat, cold, or exercise
- Transient ischemic attack (TIA) and stroke
- Pain in the hands and feet
- Vertigo/feeling dizzy

HEART[1,2,8]
- Irregular heartbeat (fast or slow)
- Heart attack or heart failure
- Enlarged heart

GASTROINTESTINAL[1,2]
- Feeling sick, vomiting, cramping, and diarrhoea
- Pain/bloating after eating, feeling full after a small amount of food
- Constipation
- Difficulty managing weight

As a result of other symptoms and potentially due to the disease itself, people with Fabry may also experience: depression; anxiety; panic attacks; and social problems[2]

Key points

Here's a summary of the important messages from this booklet:

1. Fabry is a genetic disorder which runs in families.
2. If a member of your family has Fabry, there is a chance that you might as well.
3. Speak to a healthcare professional as soon as you are able for further information and support.

Disclaimer: This leaflet was sent to you because it is possible that you could be at risk of Fabry based on how Fabry runs in families and your relative's family tree. However, this does not necessarily mean you have the disease, and it does not in any way suggest a diagnosis of Fabry disease. Any concerned individual should speak to a healthcare professional.

References: 1. Germain DP. Orphanet J Rare Dis. 2010;5:30 2. Ortiz A, et al. Mol Genet Metab. 2018;123(4):416-427 3. Cammarata G, et al. Biomed Res Int. 2015;504784 4. Laney DA. Mol Genet Metab. 2019:126(2):S90-91 5. Yamamoto S et al. Intern Med. 2019;58(4):603-607 6. Laney DA, et al. J Genet Couns. 2013;22(5):555-564 7. DNA, genes, chromosomes and mutations. Genetic Alliance UK. Available at: https://www.geneticalliance.org.uk/information/learn-about-genetics/dna-genes-chromosomes-and-mutations/ [Last accessed May 2024] 8. Yousef Z et al. Eur Heart J. 2013;34(11):802-808 9. Desnick RJ et al. Ann Intern Med. 2003;138(4):338-346 10. Hilz MJ et al. Dig Liver Dis. 2018:50(5):429-437 11. Hoffmann B & Mayatepek E. Dtsch Arztebl Int. 2009;106(26):440-447 12. Mehta A & Hughes DA. Fabry disease. GeneReviews®. Available at: https://www.ncbi.nlm.nih.gov/books/NBK1292/ [Last accessed May 2024] 13. Germain DP et al. Clin Genet. 2019;96(2):107-117 14. How is genetic testing done? MedlinePlus. Available at: https://medlineplus.gov/genetics/understanding/testing/procedure/ [Last accessed May 2024]

NP-NN-ALL-00090424 | May 2024

This leaflet has been funded by Amicus Therapeutics

Your family & Fabry

SUPPORT AND WHAT TO DO NEXT

You are receiving this leaflet because someone in your family has been diagnosed with Fabry. Fabry is a genetic disorder that runs in families. This means there is a chance that you may also have Fabry. Speak to a healthcare professional as soon as you are able for further information and support.

What is **Fabry**?

Fabry affects everyone differently. Some people with Fabry experience no symptoms, others are severely affected, and everyone else falls somewhere in-between.[1]

Fabry has the potential to affect most of the body, but the experience of symptoms can vary between individuals – even those within the same family.[1-6]

Symptoms can develop and worsen over time, potentially resulting in serious or life-threatening complications – although this won't be the case for everyone.[1]
If you have Fabry you may or may not have experienced symptoms yet.

What causes the symptoms of **Fabry**?

People with Fabry have genetic changes that result in a certain enzyme (α-galactosidase A) not working properly.[1,6] Normally the enzyme helps break down certain sugary-fatty substances (glycosphingolipids) in the cells of our body.[1,6]

In those with a Fabry gene change, the sugary-fatty substances build up, causing problems and the symptoms of Fabry.[1,6]

What are genetic changes?[7]

Genetic information is stored in DNA, providing instructions that tell every cell in your body what to do. Changes can occur in DNA, these are errors in the instructions which mean that the cells can't function properly.

Why should you consider being tested for **Fabry**?

Talk to a healthcare professional about who in your family may be at risk of Fabry.

You may want to consider talking with a healthcare professional about being tested for Fabry.

This is because it has been identified in a relative and based on how it runs in families and your relative's family tree, it is possible you could be at risk of Fabry. However, this does not necessarily mean you have the disease.

Fabry symptoms can be hard to recognise due to how varied they can be, and because they are often similar to other more common conditions.
Fabry is also very rare, so some doctors are not familiar with the symptoms.
This means it can take a long time to be given the right diagnosis.[1,10,11]

Fabry is progressive, meaning it can get worse over time. Having a diagnosis means that someone with Fabry can get the support they need to help manage their condition, which may involve treatment.[2,12,13]

If you choose not to be tested, it's still important for you to know that Fabry is in your family and you should always tell your healthcare team if you have any health issues of your own.

What are the **next steps**?

If you would like to know more about Fabry, the next steps are to:

- **Contact a healthcare professional. This may be your relative's Fabry specialist, genetic counsellor or a member of their healthcare team**
- **Or you can take the tear-off section in this leaflet to your own doctor, who may refer you on**

A healthcare professional can assess your potential of having Fabry and discuss options for testing.

If you decide to be tested for Fabry, these tests are usually performed on a cheek swab, blood or other tissue sample.[14] Tests will be performed to look for Fabry gene changes.[6]

If a Fabry gene change is found, your medical team will discuss more about the disease, how to manage it and any potential implications.

Getting support

Talk to a healthcare professional about your potential risk of Fabry. You can take the tear-off letter to the right to your own doctor. As Fabry is rare, they may not have heard of it, but this should help start a conversation.[9] Ask your healthcare professional for details of the local patient association.

Amicus Therapeutics

Dear Doctor,

Your patient has been highlighted as potentially at risk of Fabry disease through a pedigree analysis of their relative who has been diagnosed with Fabry.

Fabry is a genetic disorder with X-linked inheritance.[1] It is a progressive, multisystemic disorder and may cause serious or life-threatening complications in both men and women.[1,2]

Fabry can be difficult to diagnose due to its rarity, overlap with more common conditions and variability of symptoms – even within a family.[1,3-7] It may be underdiagnosed and is often misdiagnosed with an average diagnostic delay of 15 years.[1,3,4] Due to its progressive nature, early intervention is thought to help prevent disease progression and lead to improved health outcomes.[2,8,9]

Based on the above you may want to begin the process of investigating for Fabry, either directly or by referral. Predictive genetic testing is available. It may be advisable that the patient's risk of Fabry be reviewed, and where possible genetic counselling be provided.

References: 1. Germain DP. Orphanet J Rare Dis. 2010;5:30 **2.** Oritz A, et al. Mol Genet Metab. 2018;123(4):416-427 **3.** Hoffmann B & Mayatepek E. Dtsch Arztebl Int. 2009;106(26):440-447 **4.** Hilz MJ et al. Dig Liver Dis. 2018;50(5):429-437 **5.** Cammarata G, et al. Biomed Res Int. 2015;504784 **6.** Yamamoto S et al. Intern Med. 2019;58(4):603-607 **7.** Laney DA. Mol Genet Metab. 2019;126(2):S90-91 **8.** Mehta A & Hughes DA. Fabry disease. GeneReviews®. Available at: https://www.ncbi.nlm.nih.gov/books/NBK1292/ [Last accessed May 2024] **9.** Germain DP et al. Clin Genet. 2019;96(2):107-117.