Educational project on Cystic Fibrosis

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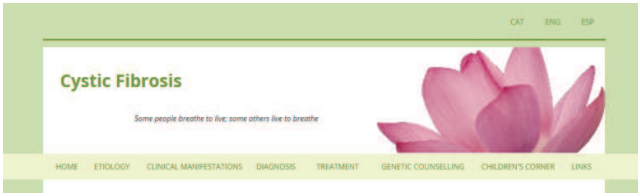


Even though Cystic Fibrosis (CF) is the most common autosomal recessive inherited disease in Caucasians, it is still considered an orphan disease. CF relies on a mutation on the CFTR gene that causes an alteration on the CFTR protein. This alteration results in an impaired chloride and water transport across epithelial cells membrane leading to a thick mucus which causes the complications of the disease. There is no cure nowadays for CF.
This project pretends to provide truthful and reliable information about Cystic Fibrosis through the creation of a website. The website was created using the online tool Wix.

http://rlleuger.wix.com/cystic-fibrosis


Welcome to this Cystic Fibrosis information site

Introduction

The website was designed in a way that could cover all the different aspects of Cystic Fibrosis.
Therefore, the sections in which it was divided are: introduction, etiology, clinical manifestations, diagnosis, treatment, genetic counselling, children's corner and links.
Moreover, to reach a major audience, all the content is available in three different languages: English, Catalan and Spanish.


The CFTR gene

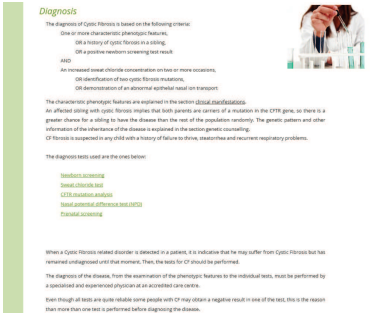
Etiology

Focused on the basis of the disease, this section contains information regarding the defective CFTR gene and protein, and its impact on the chloride and other ions transport through epithelial cell membranes.
Besides, detailed characteristics of the pathophysiology of the different affected systems is provided.


Clinical manifestations

Clinical manifestations

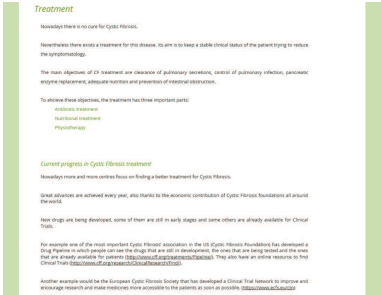
The signs and symptoms of the disease are included in this section, divided by the different systems affected (respiratory system, endocrine and digestive system, skin and reproductive system).
Also, the possible complications arising from Cystic Fibrosis are listed.


Diagnosis

Diagnosis

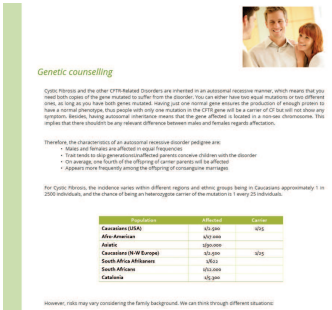
The different diagnostic methods and the corresponding threshold criteria are explained in this section.
These tests are:

- Newborn screening
- Sweat chloride test
- CFTR mutation analysis
- Nasal potential difference test (NPD)
- Prenatal screening


Treatment

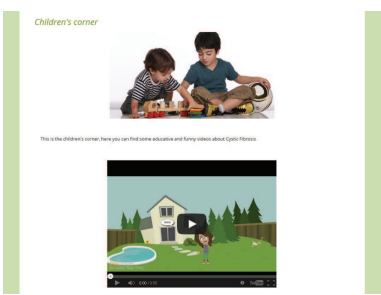
Treatment

Although nowadays there is no cure for Cystic Fibrosis, a proper management treating the different symptoms helps improving the prognosis. Thus, Cystic Fibrosis treatment has three main parts: antibiotic treatment, physiotherapy and nutritional treatment. All of them are explained in this section and also a short summary of the current studies and progress that is being done at this moment.


Genetic counselling

Genetic counselling

Genetic counselling can be an important resource for Cystic Fibrosis patients and their families; either for those couples that want to conceive a child or those relatives that may have the disease but have not been diagnosed yet. Therefore, in this section we can find information related to the inheritance of the disease and the risks of having CF.


Children's corner

Children's corner

In order to reach a maximum audience, this section was created to make the information accessible for the little ones. Four animated videos were designed and produced, each one regarding a different aspect of the disease:

- Introduction
- Basic information
- Physical exercise and physiotherapy
- Nutrition and antibiotic treatment


Links of interest

Links

The links' section was created to provide further reliable sources of information to the visitors of this website. The links included are from important international organizations supporting Cystic Fibrosis as well as Spanish and Catalan organizations.

Cystic Fibrosis is a non-curable autosomal recessive inherited disease that may cause respiratory, endocrine, digestive, reproductive and skin complications. This website is aimed at affected people, their friends and relatives so they can learn about the characteristics of the disease. Hence, they can affront the management of the disorder properly and obtain a better prognosis, and therefore, a better lifestyle.

Images were obtained from screenshots of the website