Cystic Fibrosis Research News

Title:

RISK FACTORS FOR CYSTIC FIBROSIS ARTHROPATHY: DATA FROM THE GERMAN CYSTIC FIBROSIS REGISTRY

Lay Title:

RISK FACTORS FOR JOINT INFLAMMATION AND JOINT PAIN IN CYSTIC FIBROSIS

Authors:

C. Grehn[1*], A.-M. Dittrich[2], J. Wosniok[3], F. Holz[1], S. Hafkemeyer[4], L. Naehrlich[5], C. Schwarz[1], Registry working group of the German CF Registry[6]

Affiliations:

[1]Department of Pediatric Pneumology, Immunology and Intensive Care Medicine, Charité – Universitätsmedizin Berlin, Germany
[2]Pediatric Pneumology, Allergology and Neonatology, Hannover Medical School, Hannover, Germany
[3]Interdisziplinäres Zentrum für Klinische Studien (IZKS), Universitätsmedizin der Johannes-Gutenberg-Universität Mainz, Germany
[4]Mukoviszidose Institut gGmbH (MI), Bonn, Germany
[5]Department of Pediatrics, Justus-Liebig-University Giessen, Germany
[6]https://muko.info/register

What was your research question?

We wanted to investigate the distribution of cystic fibrosis arthropathy within different age groups and to identify potential variables which could be connected with an increased risk to develop cystic fibrosis arthropathy.

Why is this important?

Cystic fibrosis arthropathy is the most common reason for joint pain in patients with cystic fibrosis. Cystic fibrosis arthropathy leads to additional treatment and a decrease of quality of life. Due to improvement in life expectancy, it can be assumed that cystic fibrosis arthropathy will become more important. Until now, it is a big challenge to define cystic fibrosis arthropathy and further information is needed.

Cystic Fibrosis Research News

What did you do?

We analysed data of 6069 patients included in the German cystic fibrosis registry in 2016-2017. Statistical tests were used to determine the number of people with cystic fibrosis arthropathy. Further statistical examinations were used to identify potential variables, like medication, infections, that can be linked to the occurrence of cystic fibrosis arthropathy.

What did you find?

Our data show, that the risk to develop cystic fibrosis arthropathy increases with age and that female persons are frequently more affected. Furthermore, cystic fibrosis arthropathy is more common in people with chronic *Pseudomonas aeruginosa* infection, cystic fibrosis related diabetes, pancreatic insufficiency and sinusitis.

What does this mean and reasons for caution?

Many extra-pulmonary factors contribute to the burden of cystic fibrosis. Our data point towards a tight interplay between pulmonary factors and cystic fibrosis arthropathy. Our data suggest that adequate treatment of lung manifestations of cystic fibrosis disease continues to be of utmost importance. Given the continuing rise in life expectancy of people with cystic fibrosis, the prevalence of cystic fibrosis arthropathy is destined to grow.

What's next?

Further studies are needed to explore the clinical and imaging phenotype of cystic fibrosis arthropathy in detail, to improve effective and distinct diagnosis and treatment strategies beyond the optimization of cystic fibrosis pulmonary therapy.

Original manuscript citation in PubMed

https://pubmed.ncbi.nlm.nih.gov/34034985/

cfresearchnews@gmail.com