

primary studies - published, non RCT

20 years of the Montreal Cystic Fibrosis Related Diabetes Screening Cohort: key insights.

Code: PM40368427

Year: 2025 Date:

Author: Alexandre-Heymann L

Study design (if review, criteria of inclusion for studies)

Observational study - Cohort study

Participants

Adult people with cystic fibrosis were recruited from 2004 onward in Montreal, Canada, excluding those already diagnosed with cystic fibrosis-related diabetes.

Interventions

Cystic Fibrosis Related Diabetes Screening

Outcome measures

Clinical and biological results (including oral glucose tolerance tests) were recorded regularly.

Main results

Findings from the MCFC contributed to a better understanding of cystic fibrosis-related diabetes pathophysiology (in particular, the joint roles of reduced insulin secretion and added insulin resistance) and its relationship with lung function. Over the years, we observed a shift towards overweight and obesity among cystic fibrosis patients, along with improved lung function. This could be due to improved cystic fibrosis care and to the introduction of cystic fibrosis transmembrane conductance regulator modulators. We were also able to validate new, simplified screening modalities and management strategies (e.g. physical activity) for cystic fibrosis-related diabetes.

Authors' conclusions

The MCFC has contributed to the understanding of cystic fibrosis-related diabetes and informed best practice guidelines. Future research will focus on how cystic fibrosis transmembrane conductance regulator modulators influence glycaemic control and cardiometabolic health in people with cystic fibrosis.

<http://dx.doi.org/10.1183/16000617.0220-2024>

See also

Eur Respir Rev. 2025 May 14;34(176):240220. doi: 10.1183/16000617.0220-2024. Print 2025 Apr.

Keywords

Adult; Diabetes Mellitus; Gastrointestinal Diseases; Pancreatic Diseases; non pharmacological intervention - diagn; screening; diagnostic procedures;