Journal of Diabetes Research

Special Issue on
Cystic Fibrosis Related Diabetes

Hindawi

CALL FOR PAPERS

One of the most common complications of cystic fibrosis (CF) is cystic fibrosis-related diabetes (CFRD), which affects 40–50% of CF adults, with unclear pediatric data. CFRD has significant impacts on clinical health parameters and longevity of CF patients. Nutritional status, lung function, and susceptibility to respiratory infections are worse in patients with CFRD before onset of overt diabetes. To date, consensus on the best methods to diagnose and treat CFRD remains lacking. The health decline observed in CFRD patients prior to diagnosis is due to reduced insulin production.

The American Diabetes Association recommends testing CF patients from 10 years of age using the oral glucose tolerance test (OGTT), even though this diagnostic test is not always able to identify CFRD. Indeed, the conventional OGTT has been shown to have weak capacity to diagnose diabetes mellitus in CF patients because of the variability of the test and the variability observed over time. The use of technologies is emerging with continuous glucose monitoring systems (CGMS), flash monitoring systems, and continuous subcutaneous insulin infusion (CSII). Recent studies have shown that CGMS identified a greater degree of impaired glucose tolerance than the gold standard 2-hours OGTT.

According to the clinical care guidelines, the only recommended treatment for CFRD is insulin. The insulin improves calorie intake, body weight, and airway glucose levels and reduces frequency of infection. It may be advisable to begin insulin therapy early for people developing CFRD, as soon as glucose tolerance declines, before overt diabetes. The use of CSII provides an alternative approach to basal/bolus insulin in treating CFRD. Other drugs may be useful in the treatment of CFRD such as incretins and repaglinide. In addition, the dietary management of CFRD patients is very complex and requires a multidisciplinary team approach. New generation correctors for cystic fibrosis may be beneficial in CFRD patients, but few data are present in the literature.

Authors are welcome to submit papers on innovative drugs for CFRD. Pioneering pilot studies are welcome, as well as state-of-the-art reviews about pathogenesis, diagnosis, and management of CFRD.

Potential topics include but are not limited to the following:

- Pathogenesis of cystic fibrosis related diabetes
- How and when to screen cystic fibrosis related diabetes
- Continuous glucose monitoring and flash glucose monitoring and their roles in CFRD, e.g., detection, management, and prevention of hypoglycemia
- Dietary Intervention in the treatment cystic fibrosis related diabetes
- Pharmacological treatment of diabetes or early glucose derangements in cystic fibrosis patients
- Treatment of overt diabetes with continuous subcutaneous insulin infusion
- Efficacy of new drugs in the treatment of cystic fibrosis related diabetes

Authors can submit their manuscripts through the Manuscript Tracking System at https://mts.hindawi.com/submit/journals/jdr/pdtcf/.

Papers are published upon acceptance, regardless of the Special Issue publication date.

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