Early diagnosis of eating disorders with vomiting.

Microbial biomarker for the noninvasive diagnosis and monitoring of patients with vomiting behavior in eating disorders.

Medical need

Eating Disorders (ED) are serious psychological illnesses associated with severe disturbances in people's eating behaviors.

Patients presenting vomiting behavior represent around 70% of the cases that come to specialized units.

Currently the diagnosis is made on the basis of what is expressed in consultation by the patient and/or family members, with a marker only for hypokalemia in severe cases.

Technology

In vitro kit, based on oral microbiota markers developed by the Team, for the diagnosis of vomiting behavior.

This technology allows early diagnosis using patient saliva samples, and 16S ribosomal RNA sequencing for characterization of the abundance of specific genera or species or their combination.

This technology also allows correlation of microbial levels with vomiting frequency.

Oportunity

Prevalence	Market	Other solutions
Rate of 4.1-4.5 in population aged 12-21 years. 20 million people with ED in Europe.	The global ED therapies market is estimated at USD 457.5 M in 2020 and USD 763.8 M in 2029.	There are no commercially available methods for clinical detection of vomit behavior. The current method is by means of questionnaires.

Results

Results are available from a clinical trial with 54 patients separated into a control group and a purgative behavior group.

The study has shown a significant difference in the microbiota in control patients with respect to those with vomiting behavior ($P < 0.001$).

Roadmap

IBIMA plataforma BIONAND is looking for a partner to further develop the technology through a co-development or licensing agreement.

Protection:
European and PCT patent applications
Priority: 26/05/2023

Team:
Group of Obesity, Diabetes and its comorbidities of IBIMA Plataforma BIONAND
Psychiatry and Mental Health Group of IDIBELL

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