

Diagnostics.

Predicting response method to treatments with bariatric surgery in type 2 diabetes mellitus.

A research group from the Andalusian Health Service, Biomedical Network Research Center and Biomedical Research Institute of Malaga has proposed the use of a **serum biomarker** as a predictor of the remission of type 2 diabetes mellitus (DM2) through bariatric surgery in morbidly obese subjects with DM2.

>>> Oficina de TRANSFERENCIA DE TECNOLOGÍA
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Description

Diabetes mellitus type 2 (DM2) is a chronic and progressive disease whose prevalence is increasing considerably in the past years. Its treatment has been aimed to reduce the severity of its complications, in order to avoid the development of multiple associated pathologies, as well as delaying its appearance. It has been suggested the use of bariatric surgery for the control and remission of DM2, due to reduce the patient's body weight, and also as an alternative to the treatment with other nonsurgical means. However, there are morbidly obese (OM) patients with DM2 in whom this type of intervention does not produce the remission of their disease.

The circulating miRNAs open the possibility of determining by means of little invasive methods and in a quick manner, differences in the response to a treatment or intervention depending on the profile of the individual. Until now, there was no serum biomarker described with these predictive capacities for the remission of DM2 in OM subjects after being operated through bariatric surgery.

The research group has proposed the use of a serum biomarker, that could be used for the development of a diagnostic test in which the aforementioned biomarker would be quantified, jointly with Body Mass Index (BMI) as well as glycemia in the patient's blood.

Its clinical applicability would allow to identify OM patients with DM2 that are good candidates for remitting the disease through bariatric surgery, discarding those patients that are not good candidates for DM2 remission after the surgical intervention.



Advantages

- It has very interesting clinical applications, with possible development of diagnostic tests and / or generation of technological innovations.
- This test is minimally invasive and quick to obtain the results, being only necessary a blood draw.
- This will involve a big reduction in sanitary cost, as well as invasive interventions in non-responding patients.
- Predicts in an earl way the remission of the DM2 in OM patients suffering this type of diabetes after bariatric surgery.



Intellectual Property

This technology is protected by a national patent application with the possibility of international extension.



Aims

The research group is looking for partnership and/or license agreement.



Classification

Area: Diagnostics.

Pathology: Metabolic diseases and Endocrinology.



