

# A Spanish state-of-the-art dental practice...

...only a one and half hour flight from London...

**C**linica Sicilia has been solely devoted to periodontics and implants since 1988. It has become a point of reference at European Level in periodontal and implant microsurgery. Its know-how combines highly qualified personnel and state-of-the-art technology, and its quality management system has been certified to UNE-EN-ISO 9001:2000 since the year 2000.

Since its creation, Clinica Sicilia has always been at the forefront of dental implant treatment. It is currently the only clinic in Spain that has introduced three different and complementary computer-guided surgery protocols: the SAFE protocol (Materialise, Louvain, Belgium), the Nobelguide protocol (Nobel Biocare, Gothenburg, Sweden) and the MED-3D protocol (Med-3D Implantology, Zurich, Switzerland).

The use of computer-guided surgery protocols makes it possible for implant surgery to take place virtually and for the provisional fixed prosthesis to be prepared in advance.

## How does it work?

During the first stage, Clinica Sicilia's medical team performs a detailed medical diagnosis. Next, in collaboration with the restorative dentist, or prosthodontist, the ideal type of prosthesis is designed and a 'prototype' prosthesis is created, which will be scanned along with the patient.

Then, in the digital radiology unit of Clinica Sicilia, the Computed Tomography (CT) analysis is performed with the i-CAT digital scanner. The scan takes place with the prototype prosthesis placed in the patient's mouth.

The CT analysis is instantly processed by the computer, generating a three dimensional cranial reconstruction, where, subsequently, in interconsultation, the periodontist and the restorative dentist analyse the reconstruction and study the initial position of the teeth,

as well as the amount and quality of the bone available for the implants.

Once the ideal position and the appropriate angle have been selected, virtual surgery is performed on the computer. The implants are put in place and their mechanical stability studied.

The outcome of the above process is sent to the laboratory, which manufactures the stereolithographic models and surgical template that will enable the implants to be put in place through high precision, minimally invasive surgery.

The next stage is carried out at Clinica Sicilia's Immediate Prosthesis Unit, where the template is used as a guide to place the implants in the stereolithographic models of the jaw. Together, the prosthodontist and the laboratory produce an immediate implant-supported provisional prosthesis.

Finally, in the Computer-Guided Surgery Unit of Clinica Sicilia, the implants are put in place. Aided by the latest generation microscopes and using the template, the surgeon puts the implants in place and then adapts the final high precision implant-supported provisional prosthesis.

After the operation, the patient has permanent teeth and can smile with confidence. The whole process takes just a few hours, or less than an hour if the Nobelguide protocol can be applied.

## What are the benefits?

Greater precision, less time in surgery, improved post-operative period, the possibility of performing surgery without flaps (or incisions and sutures) and the preparation of a high

precision provisional fixed prosthesis that can be adapted and put in place during the operation.

Clinica Sicilia, a practice of reference in the field of the Dental Implantology, due to its continuous investment in the latest medical technologies, is already receiving patients from outside the region and even from other countries, due to its accessibility – one and half hour flight from London and Paris, and one hour from Madrid, Barcelona and Seville.

Author: Alberto Sicilia, Medical Director, MD, PhD.



**Fernando Sicilia**  
Managing Director

**Clinica Sicilia**  
Uria  
5-2ª Planta  
33003 Oviedo  
Spain

Tel: +34 985 25 36 22  
Fax: +34 985 25 70 32

fsicilia@clinicasicilia.es  
www.clinicasicilia.es