

Postgraduate Certificate

Interventional Procedures in Carotid and Vertebral Arteries





Postgraduate Certificate Interventional Procedures in Carotid and Vertebral Arteries

- » Modality: online
- » Duration: 6 weeks
- » Certificate: TECH Global University
- » Credits: 6 ECTS
- » Schedule: at your own pace
- » Exams: online

Website: www.techtute.com/us/medicine/postgraduate-certificate/interventional-procedures-carotid-vertebral-arteries

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01

Introduction

According to various medical statistics, it is estimated that between 20 and 30% of ischemic strokes can be attributed to diseases of the carotid arteries. Vertebral Artery problems, on the other hand, are less common, but have a worrying incidence in young and middle-aged people. In this context, it is imperative that physicians keep their skills up to date with the most advanced diagnostic tools and the most disruptive therapeutic procedures. For this reason, TECH offers this program where techniques such as Thrombolytic Therapies and Endovascular Revascularization are analyzed. In addition, this comprehensive update is supported by an innovative 100% online methodology and has a teaching staff with extensive experience in Angiology and Vascular Surgery.



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Enroll in this program now! With TECH's 100% online methodology you will master the technological and therapeutic innovations that enhance Interventional Procedures in Carotid and Vertebral Arteries"

Spontaneous Carotid and Vertebral Dissection is considered a critical condition because of its incidence, generally common in young and middle-aged adults, between 30 and 50 years old. Although there is no clear cause for this pathology, its link to minor neck trauma, infections or connective tissue conditions such as Marfan syndrome or Ehlers-Danlos syndrome has been studied. Given the complexities in determining its origin and the particularity that it affects people who, because of their age group, should be healthy, its successful management has become a priority for Angiology Units in most hospital settings.

In order to offer surgeons a complete update on the procedures to intervene this and other related pathologies, TECH has designed this comprehensive Postgraduate Certificate. The program includes the most effective therapeutic strategies for Spontaneous Dissection such as acute management and long-term follow-up. In addition, this academic itinerary also covers the most innovative imaging tools for diagnosis, as well as minimally invasive techniques for interventional Atherosclerotic Occlusive Disease and Fibromuscular Dysplasia. Also, the syllabus dissects the most disruptive therapies to address Cerebrovascular Accident and cerebral venous thrombosis.

In turn, the entire university program has a 100% online study format. In other words, physicians can access the contents at any time or place, without having to travel to an on-site center, and to complete their specialization they only need a device connected to the Internet. They will not have to abandon their other work obligations at any time, since the program distinguishes itself by providing them with autonomy, without fixed schedules. On the other hand, the TECH methodology is another important success of the program. With the inclusion of the Relearning system or the analysis of real cases, specialists develop a holistic update, focused on the demands of their professional area.

This **Postgraduate Certificate in Interventional Procedures in Carotid and Vertebral Arteries** contains the most complete and up-to-date scientific program on the market.

The most important features include:

- ♦ The development of case studies presented by experts in Angiology and Vascular Surgery
- ♦ The graphic, schematic and eminently practical contents with which it is conceived gather scientific and practical information on those disciplines that are indispensable for professional practice
- ♦ Practical exercises where self-assessment can be used to improve learning.
- ♦ Its special emphasis on innovative methodologies
- ♦ Theoretical lessons, questions to the expert, debate forums on controversial topics, and individual reflection assignments
- ♦ Content that is accessible from any fixed or portable device with an Internet connection



Don't miss this academic opportunity where you will get up to date on Interventional Procedures in Carotid Body Tumors"

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Delve into the key and up-to-date methods for the management of Vasculitis, Spontaneous Dissection and Traumatic Injuries with TECH, the world's best digital university according to Forbes Magazine"

The program includes in its teaching staff, professionals from the sector who bring to this specialization the experience of their work, in addition to recognized specialists of reference societies and prestigious universities.

The multimedia content, developed with the latest educational technology, will provide the professional with situated and contextual learning, i.e., a simulated environment that will provide immersive education programmed to learn in real situations.

This program is designed around Problem-Based Learning, whereby the professional must try to solve the different professional practice situations that arise during the course. For this purpose, students will be assisted by an innovative interactive video system created by renowned and experienced experts.

Become an expert in the interpretation of normal or pathological findings from the techniques of Imaging for Evaluation of Carotid and Vertebral Arteries included in this program.

The Relearning system, of which TECH is a pioneer, will allow you to master concepts in a theoretical and practical way without having to memorize or invest long hours of study.

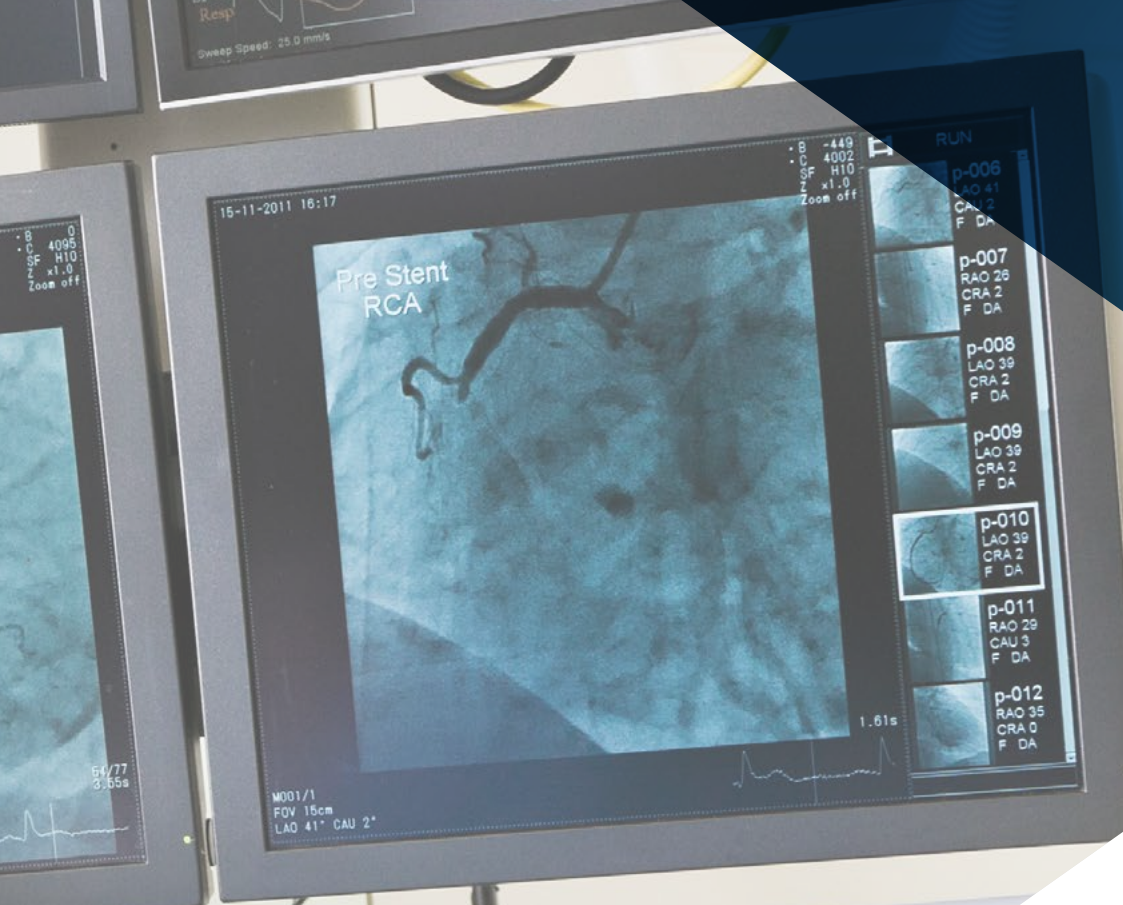


02 Objectives

This study program will provide physicians with a rigorous update from which they will be able to offer their patients more effective and safer treatments.

Throughout the university program, state-of-the-art technologies and advanced procedures that maximize the possibilities of recovery from pathologies such as Stroke or Atherosclerotic Occlusive Disease are included. In short, this is an unparalleled academic opportunity that provides Angiology specialists with an intensive and exclusive update.





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Specialize in Interventional Procedures in Carotid and Vertebral Arteries in an intensive 6-week course”



General Objectives

- ♦ Develop the technical skills necessary to accurately perform and analyze angiographic studies
- ♦ Promote an appreciation of the importance of multidisciplinary teamwork in the interpretation and management of vascular angiographic results
- ♦ Acquire skills to apply techniques such as angioplasty, Stent placement, and other minimally invasive procedures
- ♦ Determine the procedures and protocols for performing and interpreting computed tomography angiography (CTA) in the context of vascular interventional procedures





Specific Objectives

- ◆ Identify the indications for interventional procedures in carotid and vertebral arteries, including significant stenosis and aneurysms
- ◆ Determine the imaging techniques used in the diagnosis and follow-up of carotid and vertebral artery disease, such as magnetic resonance angiography (MRA) and computed tomography angiography (CTA)
- ◆ Establish the therapeutic options for carotid stenosis, including carotid endarterectomy and angioplasty with stenting
- ◆ Explore embolization techniques used in the treatment of carotid and vertebral artery aneurysms

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You will delve into thrombolytic therapies and endovascular revascularization techniques as the latest scientific advances in stroke management”

03

Course Management

This TECH faculty is distinguished, first of all, by the excellence of its members. All of the program's faculty members have accumulated clinical experience and results of significant impact. Through their exhaustive mastery of Interventional Procedures in Carotid and Vertebral Arteries, they have contributed to the quality of life of numerous patients. On the other hand, through their academic collaboration, the graduates of this university program can delve into the work strategies followed by the most prestigious hospitals when undertaking Vascular Surgeries.





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The teaching staff of this university program includes angiologists and vascular surgeons of great professional prestige"

Management



Dr. Del Río Solá, María Lourdes

- Chief from the Vascular Angiology and Surgery Service at the Valladolid University Clinical Hospital
- Specialist in Angiology and Vascular Surgery
- European Board in Vascular Surger
- Academic Correspondent of the Royal Academy of Medicine and Surgery
- Full Professor at the European University Miguel de Cervantes
- Associate Professor in Health Sciences at the University of Valladolid



04

Structure and Content

This academic itinerary addresses crucial aspects about the management of cerebral vascular pathologies, emphasizing diagnostic techniques, evaluation and interpretation of normal and pathological findings. At the same time, it delves into interventional procedures for conditions such as Fibromuscular Dysplasia, Vasculitis, Spontaneous Carotid and Vertebral Dissection, among others. These exhaustive contents can be consulted 100% in a very complete Virtual Campus, accessible 24 hours a day, where explanatory videos, interactive summaries and many more multimedia resources are also available.





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Explanatory videos, interactive summaries, infographics and other integrated multimedia resources will be included in the Virtual Campus of this comprehensive program for your integral specialization”

Module 1. Interventional Procedures in Carotid and Vertebral Arteries

- 1.1. Key Collateral Pathways in the Cerebral Circulation
 - 1.1.1. Collateral Vascularization of the Carotid and Vertebral Arteries
 - 1.1.2. Intracranial and Extracranial Collateral Circulation
 - 1.1.3. Clinical Significance in Case of Arterial Occlusion
- 1.2. Imaging in the Diagnosis and Follow-Up of Vascular Diseases
 - 1.2.1. Imaging Techniques for Evaluation of the Carotid and Vertebral Arteries
 - 1.2.2. Interpretation of Imaging Results: Normal and Pathological Findings
 - 1.2.3. Imaging in the Diagnosis and Follow-Up of Vascular Diseases
- 1.3. Interventional Procedures in Atherosclerotic Occlusive Disease
 - 1.3.1. Pathogenesis and Associated Risk Factors
 - 1.3.2. Clinical Manifestations and Diagnostic Methods
 - 1.3.3. Treatment Options and Prevention of Complications
- 1.4. Interventional Procedures in Fibromuscular Dysplasia
 - 1.4.1. Imaging Findings
 - 1.4.2. Differential Diagnosis with Other Vascular Diseases
 - 1.4.3. Therapeutic and Prognostic Management of Fibromuscular Dysplasia
- 1.5. Interventional Procedures in Vasculitis
 - 1.5.1. Vasculitis in Carotid and Vertebral Arteries
 - 1.5.2. Clinical Manifestations and Differential Diagnosis
 - 1.5.3. Immunosuppressive Treatment and Monitoring
- 1.6. Interventional Procedures in Spontaneous Carotid and Vertebral Dissection
 - 1.6.1. Pathophysiologic Mechanisms and Predisposing Factors
 - 1.6.2. Diagnostic Methods
 - 1.6.3. Acute Management and Long-Term Follow-Up
- 1.7. Interventional Procedures in Traumatic Lesions of the Carotid and Vertebral Arteries
 - 1.7.1. Traumatic Lesions of the Carotid and Vertebral Arteries
 - 1.7.2. Initial Evaluation and Diagnostic Imaging
 - 1.7.3. Treatment Strategies and Prevention of Complications





- 1.8. Interventional Procedures in Carotid Body Tumors
 - 1.8.1. Diagnostic Imaging
 - 1.8.2. Multidisciplinary Treatment: Surgical, Radiotherapy and Chemotherapy Options
 - 1.8.3. Prognosis and Long-Term Follow-Up
- 1.9. Stroke Therapy
 - 1.9.1. Acute Approach to Thrombolytic Therapy
 - 1.9.2. Endovascular Revascularization: Techniques
 - 1.9.3. Acute Phase Management and Postictus Rehabilitation
- 1.10. Interventional Procedures in Cerebral Venous Thrombosis
 - 1.10.1. Etiology and Associated Risk Factors of Cerebral Vein Thrombosis
 - 1.10.2. Clinical Manifestations and Diagnosis of Cerebral Vein Thrombosis
 - 1.10.3. Treatment and Management. Anticoagulant and Thrombolytic Therapy: Considerations



Join this academic itinerary NOW and specialize in Interventional Procedures in Carotid and Vertebral Arteries with a faculty composed of the best experts: TECH's teachers"

05

Methodology

This academic program offers students a different way of learning. Our methodology uses a cyclical learning approach: **Relearning**.

This teaching system is used, for example, in the most prestigious medical schools in the world, and major publications such as the **New England Journal of Medicine** have considered it to be one of the most effective.



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Discover Relearning, a system that abandons conventional linear learning, to take you through cyclical teaching systems: a way of learning that has proven to be extremely effective, especially in subjects that require memorization"

At TECH we use the Case Method

What should a professional do in a given situation? Throughout the program, students will face multiple simulated clinical cases, based on real patients, in which they will have to do research, establish hypotheses, and ultimately resolve the situation. There is an abundance of scientific evidence on the effectiveness of the method. Specialists learn better, faster, and more sustainably over time.

With TECH you will experience a way of learning that is shaking the foundations of traditional universities around the world.



According to Dr. Gervas, the clinical case is the annotated presentation of a patient, or group of patients, which becomes a "case", an example or model that illustrates some peculiar clinical component, either because of its teaching power or because of its uniqueness or rarity. It is essential that the case is based on current professional life, trying to recreate the real conditions in the physician's professional practice.

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Did you know that this method was developed in 1912, at Harvard, for law students? The case method consisted of presenting students with real-life, complex situations for them to make decisions and justify their decisions on how to solve them. In 1924, Harvard adopted it as a standard teaching method”

The effectiveness of the method is justified by four fundamental achievements:

1. Students who follow this method not only achieve the assimilation of concepts, but also a development of their mental capacity, through exercises that evaluate real situations and the application of knowledge.
2. Learning is solidly translated into practical skills that allow the student to better integrate into the real world.
3. Ideas and concepts are understood more efficiently, given that the example situations are based on real-life.
4. Students like to feel that the effort they put into their studies is worthwhile. This then translates into a greater interest in learning and more time dedicated to working on the course.



Relearning Methodology

At TECH we enhance the case method with the best 100% online teaching methodology available: Relearning.

This university is the first in the world to combine the study of clinical cases with a 100% online learning system based on repetition, combining a minimum of 8 different elements in each lesson, a real revolution with respect to the mere study and analysis of cases.

Professionals will learn through real cases and by resolving complex situations in simulated learning environments. These simulations are developed using state-of-the-art software to facilitate immersive learning.



At the forefront of world teaching, the Relearning method has managed to improve the overall satisfaction levels of professionals who complete their studies, with respect to the quality indicators of the best online university (Columbia University).

With this methodology, more than 250,000 physicians have been trained with unprecedented success in all clinical specialties regardless of surgical load. Our pedagogical methodology is developed in a highly competitive environment, with a university student body with a strong socioeconomic profile and an average age of 43.5 years old.

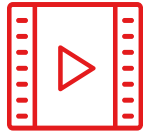
Relearning will allow you to learn with less effort and better performance, involving you more in your specialization, developing a critical mindset, defending arguments, and contrasting opinions: a direct equation to success.

In our program, learning is not a linear process, but rather a spiral (learn, unlearn, forget, and re-learn). Therefore, we combine each of these elements concentrically.

The overall score obtained by TECH's learning system is 8.01, according to the highest international standards.



This program offers the best educational material, prepared with professionals in mind:



Study Material

All teaching material is produced by the specialists who teach the course, specifically for the course, so that the teaching content is highly specific and precise.

These contents are then applied to the audiovisual format, to create the TECH online working method. All this, with the latest techniques that offer high quality pieces in each and every one of the materials that are made available to the student.



Surgical Techniques and Procedures on Video

TECH introduces students to the latest techniques, the latest educational advances and to the forefront of current medical techniques. All of this in direct contact with students and explained in detail so as to aid their assimilation and understanding. And best of all, you can watch the videos as many times as you like.



Interactive Summaries

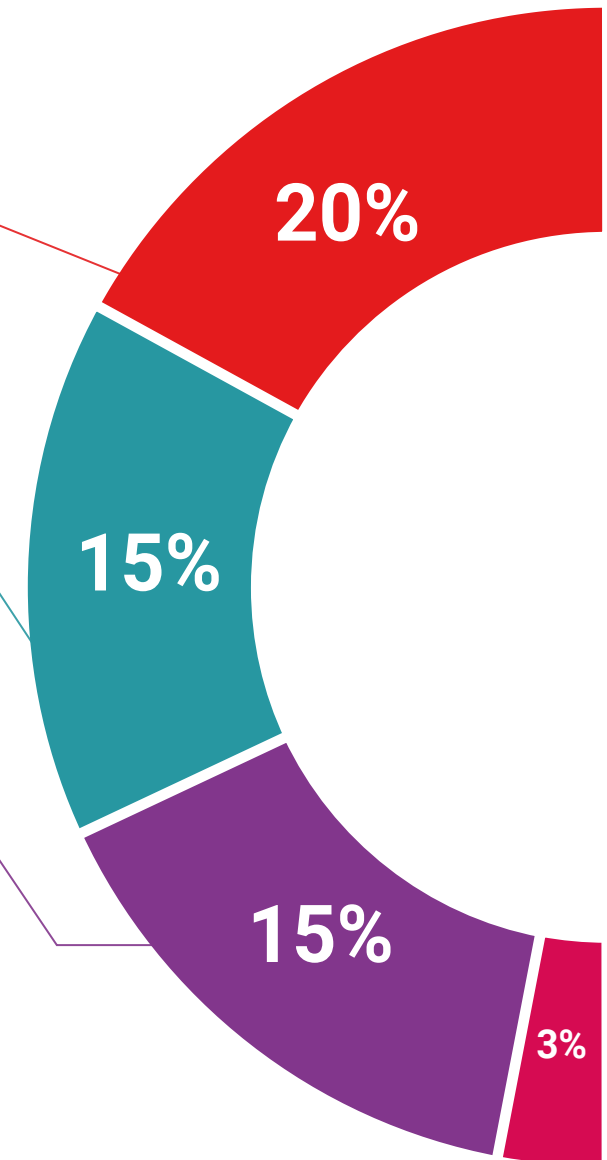
The TECH team presents the contents attractively and dynamically in multimedia lessons that include audio, videos, images, diagrams, and concept maps in order to reinforce knowledge.

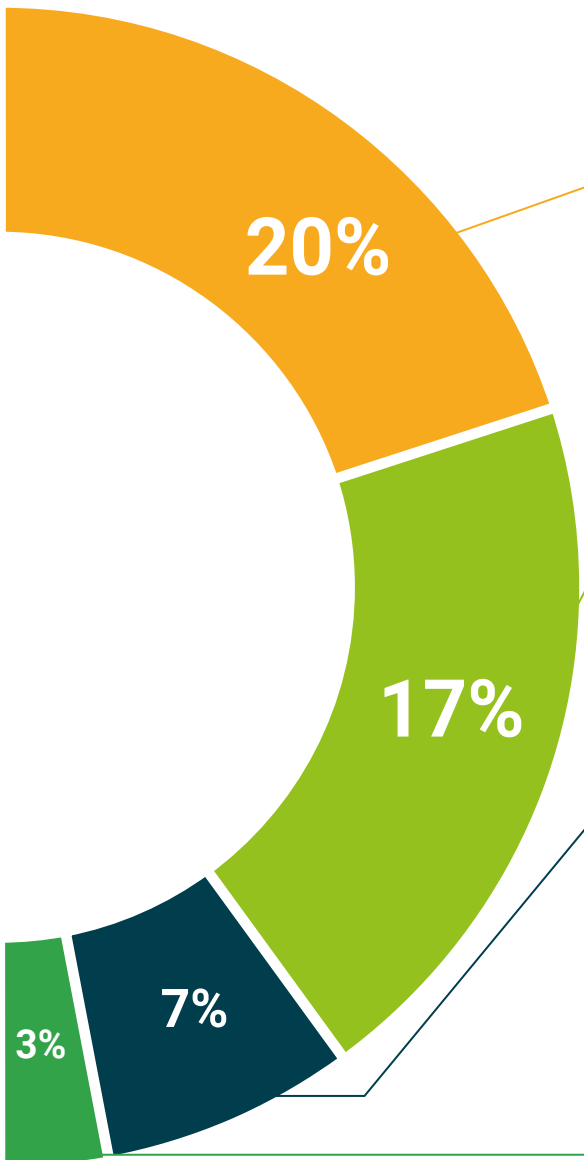
This exclusive educational system for presenting multimedia content was awarded by Microsoft as a "European Success Story".



Additional Reading

Recent articles, consensus documents and international guidelines, among others. In TECH's virtual library, students will have access to everything they need to complete their course.





Expert-Led Case Studies and Case Analysis

Effective learning ought to be contextual. Therefore, TECH presents real cases in which the expert will guide students, focusing on and solving the different situations: a clear and direct way to achieve the highest degree of understanding.



Testing & Retesting

We periodically evaluate and re-evaluate students' knowledge throughout the program, through assessment and self-assessment activities and exercises, so that they can see how they are achieving their goals.



Classes

There is scientific evidence on the usefulness of learning by observing experts. The system known as Learning from an Expert strengthens knowledge and memory, and generates confidence in future difficult decisions.



Quick Action Guides

TECH offers the most relevant contents of the course in the form of worksheets or quick action guides. A synthetic, practical, and effective way to help students progress in their learning.



06 Certificate

The Postgraduate Certificate in Interventional Procedures in Carotid and Vertebral Arteries guarantees, in addition to the most accurate and up-to-date knowledge, access to a Postgraduate Certificate issued by TECH Global University.





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Successfully complete this program and receive your university qualification without having to travel or fill out laborious paperwork”

This private qualification will allow you to obtain a **Postgraduate Certificate in Interventional Procedures in Carotid and Vertebral Arteries** endorsed by **TECH Global University**, the world's largest online university.

TECH Global University is an official European University publicly recognized by the Government of Andorra ([official bulletin](#)). Andorra is part of the European Higher Education Area (EHEA) since 2003. The EHEA is an initiative promoted by the European Union that aims to organize the international training framework and harmonize the higher education systems of the member countries of this space. The project promotes common values, the implementation of collaborative tools and strengthening its quality assurance mechanisms to enhance collaboration and mobility among students, researchers and academics.

This **TECH Global University** private qualification is a European program of continuing education and professional updating that guarantees the acquisition of competencies in its area of knowledge, providing a high curricular value to the student who completes the program.

Title: **Postgraduate Certificate in Interventional Procedures in Carotid and Vertebral Arteries**

Modality: **online**

Duration: **6 weeks**

Accreditation: **6 ECTS**





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