Postgraduate Diploma

Diagnosis of Patients with Chest Pain

tech technological university

Postgraduate Diploma
Diagnosis of Patients with Chest Pain

Course Modality: **Online**

Duration: **6 months**

Certificate: **TECH Technological University**

Teaching Hours: **450 h.**

Website: **www.techtitute.com/in/medicine/postgraduate-diploma/postgraduate-diploma-diagnosis-patients-chest-pain**

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01
Introduction

Advances in technology have brought with them a myriad of advantages in the development of tools, also in the medical field. With regard to patients with chest pain, the use of imaging techniques such as ultrasound or magnetic resonance imaging is enlightening to determine possible cardiac complications. Knowing that the use of these methods and the interpretation of their results is part of the routine of physicians, this program includes the most innovative and necessary aspects for the specialists to get up to date with the most recent procedures and concepts. A program designed by the best experts in the field and with all the facilities provided by its 100% online format.

Keep abreast of the latest developments in tools and techniques for the management of patients with chest pain with this Postgraduate Diploma"

The consultation of patients with chest pain is quite frequent, not only in the area of cardiology, but also in primary care and emergency care. That is why this condition involves physicians from different medical specialties, since in the case of Acute Coronary Syndrome (ACS) or any other pathology derived from heart disease, a prompt and protocol action is necessary. For this reason, these professionals must know the latest developments in diagnosis and management of this type of patients, allowing them to approach each case with the guarantee of knowing that they have the best knowledge in cardiac matters.

TECH presents the Postgraduate Diploma in Diagnosis of Patients with Chest Pain, a comprehensive program with which the specialists will be able, from the hand of the best experts in the sector, to get up to date based on the latest information regarding the management of patients suffering from this condition.

This program is divided into 3 modules in which, in a professional and comprehensive manner, the different aspects of the subject will be studied: from the clinical presentation of coronary syndromes and their classification, to imaging and ischemia detection tests, with special emphasis on TTE and other techniques in the acute evaluation of the patient and in the hospital phase.

The graduates will have access to the content 24 hours a day through the virtual classroom. Further, the totality of material will be available from the beginning of the Postgraduate Diploma, and can be downloaded to any electronic device with an Internet connection. TECH provides the specialists with all the necessary tools to keep up to date with the latest developments in the Diagnosis of Patients with Chest Pain, adapting the educational experience to their availability and their own study methodology.

This **Postgraduate Diploma in Diagnosis of Patients with Chest Pain** contains the most complete and up-to-date scientific program on the market. The most important features include:

* The development of practical cases presented by experts in Cardiology
* The graphic, schematic, and practical contents with which they are created, provide scientific and practical information on the disciplines that are essential 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 electronic device with an Internet connection

A program that will help you delve into the possible causes of ACS, and its classification from an operational point of view"

"
You will be provided with supplementary material in the form of detailed videos, research articles and much more, which will allow you to expand on each module as you wish"

The teaching staff have selected real clinical cases from their own experience with which you will be able to put the concepts developed into practice during the program.

This program highlights the value of transthoracic echocardiography in patients with STEACS, especially when mechanical complications arise.

The program's teaching staff includes professionals from sector who contribute their work experience to this educational program, as well as renowned specialists from leading societies and prestigious universities.

Its 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 an immersive education programmed to learn in real situations.

The design of this program focuses on Problem-Based Learning, by means of which the professionals must try to solve the different professional practice situations that are presented throughout the program. For this purpose, the student will be assisted by an innovative interactive video system created by renowned experts.
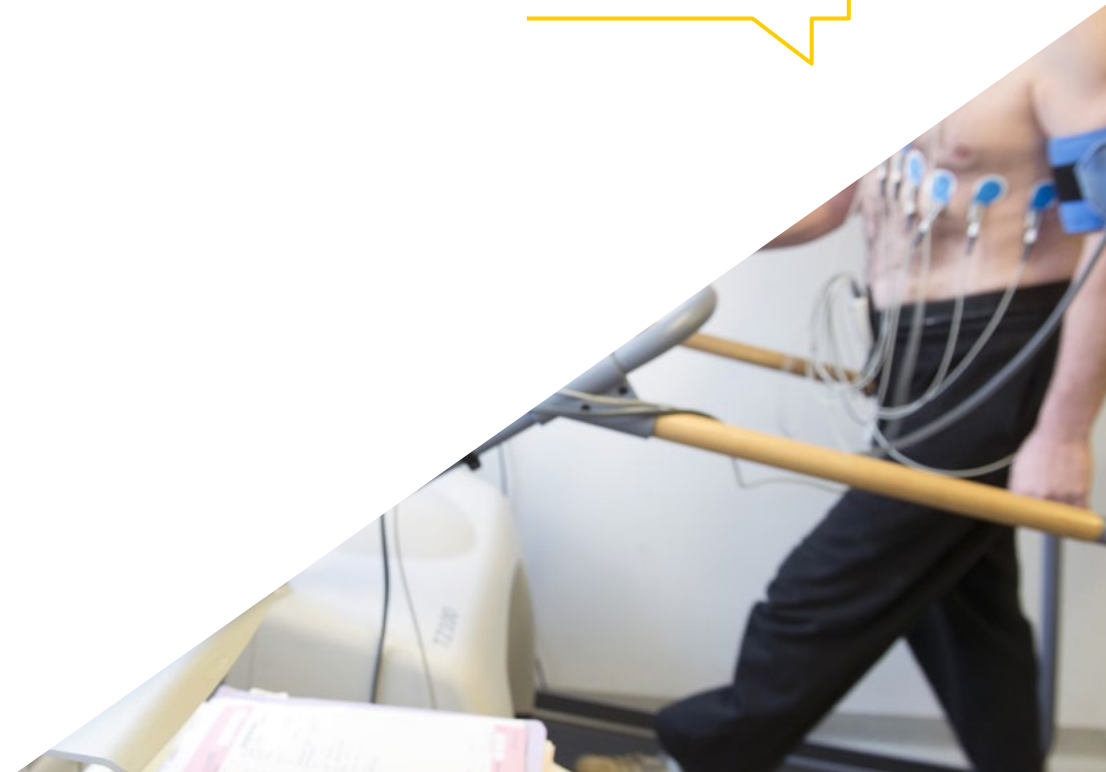
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Objectives

The implementation of this Postgraduate Diploma in Diagnosis of Patients with Chest Pain is based on the demand of physicians from different branches of medicine to have access to a program that allows them to keep up to date with scientific advances in this condition, but at the same time provides them with the necessary flexibility to combine it with their busy working lives. That is why TECH's objective with this program is to offer the best and most complete content that will allow them to update their knowledge and provide them with all the necessary information that will turn them into experts in the field.

Reaching your educational goals, without neglecting your professional ones, is possible with this 100% online program"

General Objectives

* Delve into Acute Coronary Syndrome (ACS) starting with its pathophysiology and its importance as one of the main causes of death in civilized countries

* Professionalize skills in the assessment and differential diagnosis of chest pain in the emergency department understanding the value of the different complementary techniques available

* Adequately classify the patient's initial risk and the most appropriate prehospital treatment and monitor measures in the prehospital phase

* Internalize reperfusion therapies, their limitations, advantages and protocols, understand the great importance of ischemia time

* Diagnose and manage the mechanical and arrhythmic complications that can occur in this syndrome

* Implement appropriate treatment measures during the hospital phase and the value of Coronary Units

* Develop the value and structure of Cardiac Rehabilitation programs.

* Understand the treatments that have provided value in secondary prevention of these patients

Specific Objectives

Module 1. Clinical Presentation of Coronary Syndromes and Classification NSTEACS 1. Epidemiology. Pathophysiology and Classification

- Recognize the various clinical manifestations of coronary artery disease
- Classify acute coronary syndromes and their reasons
- Adapt the epidemiology and the different clinical presentations of Non-ST Segment Elevation ACS (NSTEACS)
- Delve into the different electrocardiographic manifestations of NSTEACS
- Stratify patients by thrombotic and hemorrhagic risk to individualize their treatment
- Delve into variant angina and coronary vasospasm as a cause of ACS

Module 2. NSTEACS 2. Imaging and Ischemia Detection Tests

- Correctly evaluate patients with chest pain in the emergency department and the value of chest pain units
- Assess the use of transthoracic ultrasound at the bedside in patients with chest pain
- Master the use of ergometry and stress echo in the assessment of the patient with chest pain
- Internalize the use of CT in the triple rule-out (coronary artery disease, aortic dissection and coronary artery disease) of chest pain
- Recognize the usefulness of MRI in patients with chest pain and the value of imaging tests in general in the long-term follow-up of these patients

Module 3. NSTEACS 3. TTE and Other Imaging Tests in Acute Patient Assessment and in the Hospital Phase

- Monitor the usefulness of imaging techniques in the evaluation of patients with NSTEACS with suspected mechanical complications
- Monitor the usefulness of imaging techniques in the prognostic assessment of the patient with long-term NSTEACS
- Understand the new echocardiographic parameters that may be useful in the prognostic assessment of the patient
- Deepen the knowledge of MINOCA, patients with ischemic myocardial damage, but without evidence of obstructive epicardial coronary artery disease

You will have access to the Virtual Classroom at any time, allowing you to organize your day and set your own schedule"

03
Course Management

TECH chooses for all its programs the best management and teaching team related to the specialization. That is why in this Postgraduate Diploma we find a faculty of cardiologists with an extensive career not only in the management of patients with coronary heart disease and cardiac conditions of different types, but also have experience in university teaching and research. This gives the content a realistic and practical vision that will enable the graduates to get more out of this program.

Arrange individualized tutoring with experts in cardiology and discuss with them the present and future of techniques and procedures in clinical patient management"

Management

Dr. Botas Rodríguez, Javier

- Head of Cardiology Service, Alcorcón Foundation of the HU
- Director of the Cardiac Catheterization Laboratory at the Alcorcón Foundation. University Hospital
- Director of the Cardiac Catheterization Laboratory at the Alcorcón Foundation. University Hospital
- Associate Professor of Cardiology of the Degree in Medicine at the Rey Juan Carlos University
- Doctorate in Medicine (Magna Cum Laude) from the Faculty of Medicine at the Autonomous University of Madrid
- Residency and specialization in Cardiology at the Gregorio Marañón University Hospital
- Postdoctorate in Interventional Cardiology from Stanford University

Professors

Dr. Vaqueriza Cubillo, David
- FEA of Clinical Cardiology and Multidisciplinary Unit of Heart Failure, Hospital Infanta Leonor Madrid
- Specialist of the Cardiology Unit, Beata María Ana de Jesús Hospital Madrid
- Degree in Medicine from the Complutense University of Madrid
- Resident in Cardiology at 12 de Octubre University Hospital. Madrid
- Online Master's Degree in Cardiology "Professor in Cardiology" by the Miguel Hernández University. Valence

Dr. González Mansilla, Ana
- Attending Physician. in Cardiology at the Gregorio Marañón General University Hospital
- Medical Specialist, 12 de Octubre University Hospital
- PhD in Medicine and Surgery from the Complutense University of Madrid
- Member of: Cardiovascular Research Network of Gregorio Marañón Biomedical Research Foundation, Cardiovascular Research Network of the Carlos III Health Institute

Dr. De Cortina Camarero, Cristina
- Cardiology FEA, Hospital Infanta Leonor
- Assistant Physician at the Cardiology Service, Gregorio Marañón Hospital
- Assistant Cardiologist at Los Madroños Hospital
- Assistant Cardiologist at CECAM, San Rafael Hospital
- Dependent Researcher of the the Noninvasive Cardiology Department of the Cardiology Service, Gregorio Marañón Hospital
- Assistant Professor at the Complutense University of Madrid
- PhD in Cardiac Medicine from the Complutense University of Madrid
- Specialization in Cardiology at the Gregorio Marañón General University Hospital
- Master's Degree in as Diagnostic Imaging from the San Antonio Catholic University of Murcia
- Master's Degree in Cardiology from the University of Miguel Hernández de Elche

Structure and Content

This Postgraduate Diploma has been designed based on the latest and most relevant content in cardiology, specifically in the Diagnosis of Patients with Chest Pain. It is the result of months of research and preparation of the most complete program at the forefront of the latest developments in cardiac medicine. The team of experts leading this program has carefully selected each section based on their consideration of the experience they have gained from their day-to-day practice.

"

Thanks to TECH's pedagogical methodology, the teaching load is reduced, which saves study time, but allows the specialists to continue updating their knowledge in a complete and productive way"

Module 1. Clinical Presentation of Coronary Syndromes and Classification NSTEACS 1. Epidemiology. Pathophysiology and Classification

1.1. Forms of presentation of coronary artery disease: chronic and acute coronary syndromes

1.2. Operational Classification of ACS Based on ECG, Non-ST Segment Elevation ACS Epidemiology

1.3. Pathophysiology and Correlation with Anatomic Pathology

1.4. Unstable Angina and Non-Q AMI, Clinical Features

1.5. ECG and Non-ST Segment Elevation ACS

1.6. Complementary Diagnostic Laboratory Tests and RXT in Non-ST Segment Elevation ACS

1.7. Risk Stratification, Thrombotic Risk Scales

1.8. Risk Stratification, Hemorrhagic Risk Scales

1.9. Variant Angina and Coronary Vasospasm Clinical Features

1.10. Vospasm Provocation Tests. Treatment and Prognosis of Vasospasm

Module 2. NSTEACS 2. Imaging and Ischemia Detection Tests

2.1. Differential Diagnosis of TD in the Emergency Department

2.2. Imaging Protocols in Emergency Department TD Units Assessment and Algorithm for the Diagnosis of Patients with TD in the Emergency Department

2.3. Value of Transthoracic Echocardiography in the Assessment of the Patient with Suspected NSTEACS Use of POCUS

2.4. Ergometry and Effort Echo/Stress Echo in the Patient with TD in the Emergency Department. Indications and Technique

2.5. Isotopic Perfusion Tests. Indications and Technique

2.6. Coronary CT in the ED patient with TD. Indications and Technique

2.7. Role of MRI in NSTEACS and Patients with Chest Pain. Indications and Technique

2.8. Anatomical Approach vs. Functional in the Diagnostic Assessment of the Patient with Chest Pain

2.9. Long-Term Follow-Up Using Imaging Techniques

Module 3. NSTEACS 3. TTE and Other Imaging Tests in Acute Patient Assessment and in the Hospital Phase

3.1.   CXR in NSTEACS

3.2.   Value of Transthoracic Echocardiography in the Patient with NSTEACS

3.3.   Transthoracic Echocardiographic Assessment of Mechanical Complications of NSTEACS

3.4.   Echocardiographic Assessment of the Patient with Heart Failure or Cardiogenic Shock

3.5.   Usefulness of Imaging Techniques in the Prognostic Assessment of the Patient with NSTEACS. Diagnostic Assessment of Residual Ischemia and Myocardial Viability

3.6.   New Techniques for Myocardial Deformation in NSTEACS

3.7.   MINOCA Causes and Prognosis

3.8.   Usefulness of MRI in Patients With Myocardial Damage Without Epicardial Coronary Disease

3.9.   Assessment of Myocardial Perfusion by Contrast Echocardiography. Correlation with Angiographic Findings

Become a Postgraduate Diploma in Diagnosis of Patients with Chest Pain in only 6 months and from home with the largest online University in the world"

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.

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. Gérvas, 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.

"

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.

01 learning from evidence

02 relearning from evidence

03 testing

04 learning from an expert

05 neurocognitive context dependent learning

06 Von-Restorff effect

07 case based learning through storytelling

08 competencies testing (retesting)

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.

20%

15%

15%

3%

20%

17%

7%

3%

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.

Certificate

The Postgraduate Diploma in Diagnosis of Patients with Chest Pain guarantees students, in addition to the most rigorous and up-to-date education, access to a Postgraduate Diploma issued by TECH Technological University.

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

This **Postgraduate Diploma in Diagnosis of Patients with Chest Pain** contains the most complete and up-to-date scientific program on the market.

After the student has passed the assessments, they will receive their corresponding **Postgraduate Diploma** issued by **TECH Technological University** via tracked delivery*.

The certificate issued by **TECH Technological University** will reflect the qualification obtained in the Postgraduate Diploma, and meets the requirements commonly demanded by labor exchanges, competitive examinations, and professional career evaluation committees.

Title: **Postgraduate Diploma in Diagnosis of Patients with Chest Pain**

Official N° of Hours: **450 h.**

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Awards the following
CERTIFICATE
to

Mr./Ms. _____, with identification number _____.
For having passed and accredited the following program

POSTGRADUATE DIPLOMA
in

Diagnosis of Patients with Chest Pain

This is a qualification awarded by this University, equivalent to 450 hours, with a start date of dd/mm/yyyy and an end date of dd/mm/yyyy.

TECH is a Private Institution of Higher Education recognized by the Ministry of Public Education as of June 28, 2018.

June 17, 2020

Tere Guevara Navarro
Dean

This qualification must always be accompanied by the university degree issued by the competent authority to practice professionally in each country. Unique TECH Code: AFWORD23S techtitute.com/certificates

*Apostille Convention. In the event that the student wishes to have their paper certificate issued with an apostille, TECH EDUCATION will make the necessary arrangements to obtain it, at an additional cost.

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Postgraduate Diploma
Diagnosis of Patients with Chest Pain

Course Modality: **Online**
Duration: **6 months**
Certificate: **TECH Technological University**
Teaching Hours: **450 h.**

Postgraduate Diploma

Diagnosis of Patients with Chest Pain

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