

# Postgraduate Certificate

Considerations in Acute Postoperative Pain.  
Clinical Situations





## Postgraduate Certificate Considerations in Acute Postoperative Pain. Clinical Situations

- » Modality: online
- » Duration: 6 weeks
- » Certificate: TECH Technological University
- » Dedication: 16h/week
- » Schedule: at your own pace
- » Exams: online

Website: [www.techtute.com/us/medicine/postgraduate-diploma/postgraduate-diploma-considerations-acute-postoperative-pain-clinical-situations](http://www.techtute.com/us/medicine/postgraduate-diploma/postgraduate-diploma-considerations-acute-postoperative-pain-clinical-situations)

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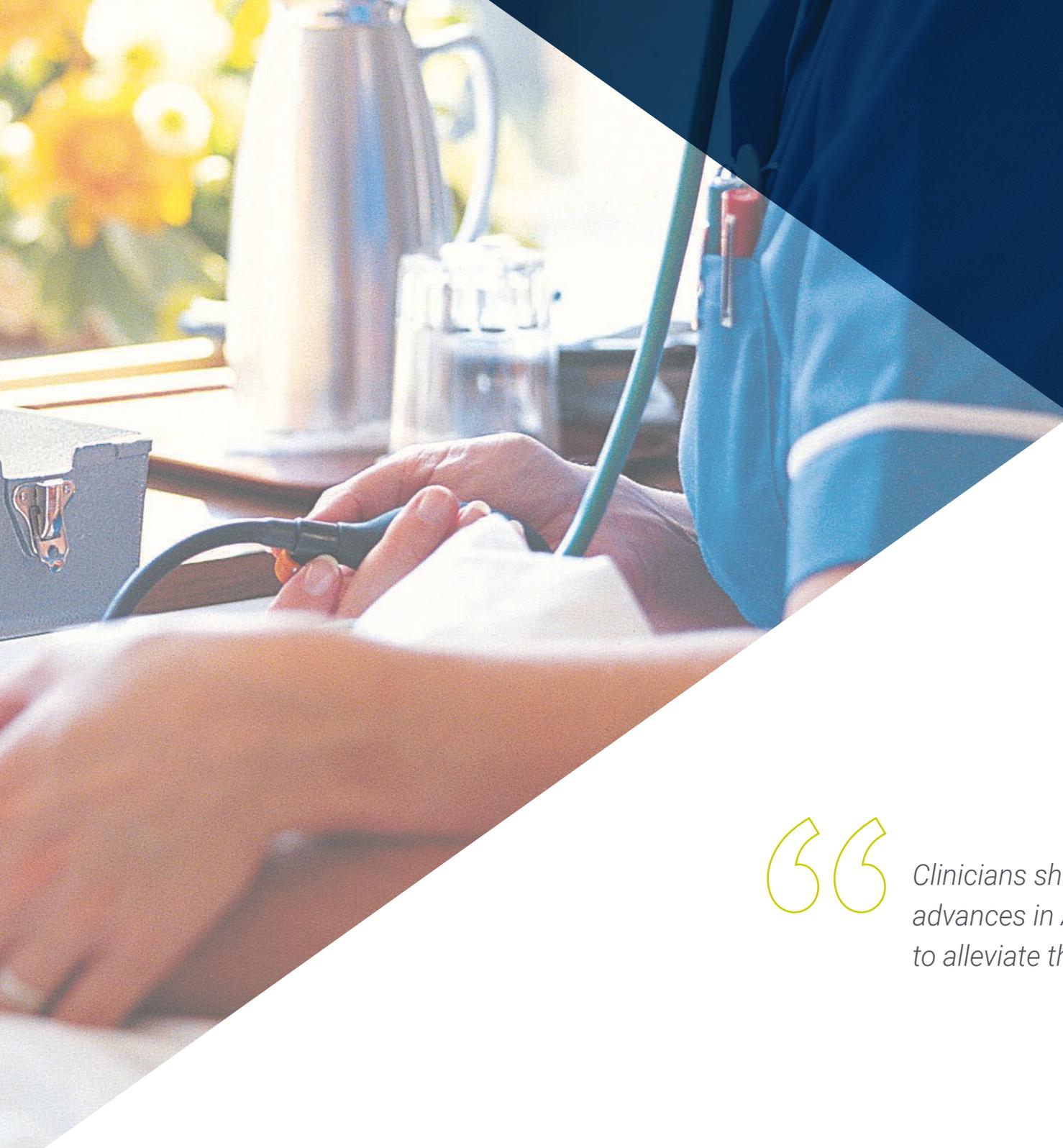
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# 01

# Introduction

The approach to postoperative pain requires a strategy that should be planned from the preoperative period. For this, it is necessary to take into account the individual connotations and clinical history of each patient. Therefore, thanks to this program, specialists will be able to improve their techniques in Acute Postoperative Pain.





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*Clinicians should be aware of the latest advances in Acute Postoperative Pain to alleviate their patients' symptoms"*

This Postgraduate Certificate has been designed by anesthesiologists with extensive experience in the management of pain, both acute and chronic, in daily clinical practice, thus offering students a global vision of the clinical problem of pain in our environment.

The program addresses the management of acute postoperative pain, an essential content for students in pain therapeutics education. The benefits of good pain control in the perioperative period, in the outcome of surgery and in the decrease of postoperative complications have been demonstrated. That is why Acute Postoperative Pain should be known in depth by experts in the field.

In this Postgraduate Certificate, the health professional will find updates on pain management strategies according to different comorbidities such as respiratory, psychiatric, cardiological, renal or neurological pathologies. It especially focuses on patient groups that require more specific control, such as the elderly patient and the patient in chronic treatment for pain or with dependencies. These population groups are increasingly present in surgical activity and require a detailed approach to the management of acute postoperative pain.

It is true that advances in surgery allow more frequent minimally invasive procedures. However, interventions where severe or very severe postoperative pain is expected persist, such as in major abdominal surgeries, cardiac and thoracic surgery, burn patients or orthopedic surgery. This program includes these types of interventions, with updated information on analgesic techniques and procedures in cases where pain control is essential and a challenge for medical teams.

This **Postgraduate Certificate in Considerations in Acute Postoperative Pain. Clinical Situations** 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 Acute Postoperative Pain
- ♦ 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
- ♦ Novelties on Acute Postoperative Pain
- ♦ Practical exercises where self-assessment can be used to improve learning
- ♦ Its special emphasis on innovative methodologies in Acute Postoperative Pain
- ♦ 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



*This Postgraduate Certificate in Considerations in Acute Postoperative Pain will allow you to improve your daily practice"*

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*This Postgraduate Certificate is the best investment you can make in your education because, besides being up to date in the latest advances in Acute Postoperative Pain, you will obtain a certificate from TECH Technological University"*

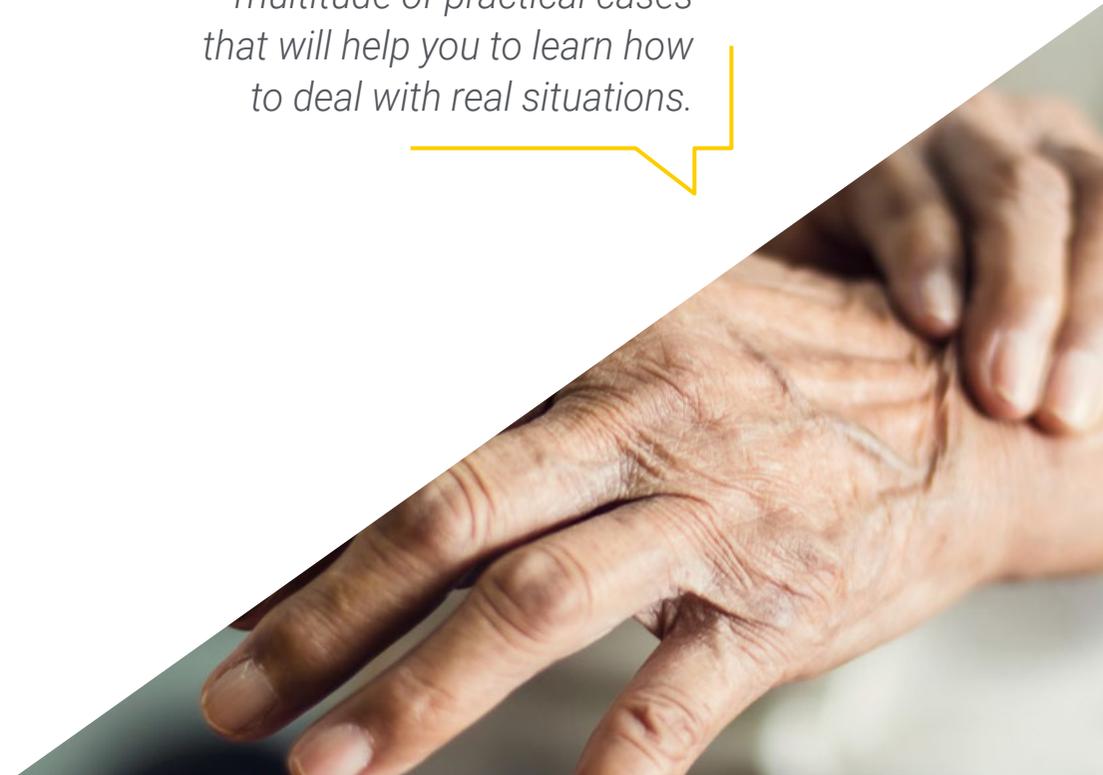
It includes in its teaching team professionals belonging to the field of Acute Postoperative Pain, who contribute to this program with the experience of their work, as well as renowned specialists from reference societies and prestigious universities.

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 training that is programmed to train students 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 academic year. For this purpose, the specialist will be assisted by an innovative interactive video system created by renowned experts in Postoperative Acute Pain Management with extensive medical experience.

*If you are looking for the best way to help your patients in the treatment of acute postoperative pain, don't miss the opportunity to educate yourself with us.*

*This Postgraduate Diploma will allow you to learn with a multitude of practical cases that will help you to learn how to deal with real situations.*



02

# Objectives

This Postgraduate Certificate in Considerations in Acute Postoperative Pain. Clinical Situations is oriented to facilitate the performance of the professional dedicated to medicine with the latest advances and most innovative treatments in the sector.





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*Thanks to our Postgraduate Certificate you will learn about the latest developments in Acute Postoperative Pain"*



## General Objectives

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- Update Knowledge on Pathophysiology, Neuroanatomy, and Etiopathogenesis of Pain
- Acquire the Skills to Adequately Assess Pain Based on the Patient's Clinical History and Physical Examination
- Obtain the Necessary Knowledge to Determine the Diagnostic Methodology in the Patient Suffering from Pain
- Establish the Updated Theoretical Basis of Pharmacological Therapies Useful in the Treatment of Pain
- Know the Advances in Non-pharmacological Therapies and Invasive Therapies in the Control of Acute and Chronic Pain
- Develop Competencies for the Adequate Control of Pain in the Perioperative Period in Different Clinical Situations and Surgical Procedures
- Broaden Knowledge of Pain Management in the Gynecological and Obstetrical Field
- Delve into the Most Relevant Concepts of Pain Management in Pediatric Patients
- Achieve the Ability to Define, Evaluate, and Determine the Diagnostic and Therapeutic Approach in Patients with Chronic Pain of Neuropathic, Musculoskeletal, Oncologic, and Visceral Origin





## Specific Objectives

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- ◆ Know how to Differentiate between the Management of Acute Postoperative Pain in Different Clinical Situations
- ◆ Know the Specificities of the Elderly Patient with Respect to their Response to Pain and its Therapeutic Management, Side Effects, and Contraindications of Analgesic Techniques or Medications and their Therapeutic Alternatives
- ◆ Acquire Skills to Establish Adequate Analgesic Treatment in Patients Treated for Chronic or Dependent Pain
- ◆ Assimilate Concepts for the Treatment of Acute Postoperative Pain in Different Surgical Procedures
- ◆ Establish the basis of knowledge of organizational systems and acute postoperative pain management in intrahospital acute pain units
- ◆ Assimilate the Importance of the Chronification of Acute Postoperative Pain And to Know the Pathophysiological Mechanisms, Risk Factors, and Prevention Strategies

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*Take the step to catch up on the latest developments in Acute Postoperative Pain Considerations”*

03

# Course Management

The teaching team of the program includes leading experts in Acute Postoperative Pain, who will share their work experience in this program. Additionally, other recognized specialists participate in its design and preparation which means that the program is developed in an interdisciplinary manner.





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*Leading professionals in the field have come together to teach you the latest advances in the Comprehensive Approach to Acute Postoperative Pain and Chronic Pain"*

## International Guest Director

Dr. Shehebar specializes in Sports/Spinal Pain Management, Musculoskeletal Medicine and Cancer Pain Management. It utilizes several treatment modalities uniquely tailored to the patient. Each can expect a highly personalized, evidence-based medical evaluation to analyze, diagnose and treat pain symptoms or pain-related conditions.

Dr. Shehebar performs epidurals, medial branch (facet blocks), radiofrequency ablation, muscle trigger point injections, spinal cord/peripheral nerve stimulators, platelet-rich plasma, joint and nerve injections using imaging guidance, including fluoroscopy and ultrasonography. He is also part of the **Integrated Pain Management Subdepartment** and is interested in **employing multimodal therapies along with rehabilitation techniques.**

In addition, Shehebar is an **Assistant Professor of Anesthesiology, Perioperative and Pain Medicine at the Icahn School of Medicine at Mount Sinai.** He graduated from Baruch College in New York with a degree in Psychology and Biology and from The George Washington University School of Medicine and Health Sciences with a degree in Medicine.

After a medical internship at Beth Israel Medical Center, Dr. Shehebar completed his board certification residency in Anesthesiology at the Icahn School of Medicine at Mount Sinai and, in addition, completed his fellowship in Interventional Pain Medicine at the Icahn School of Medicine at Mount Sinai.

As of January 2020, Dr. Shehebar has assumed the role of **Associate Director of the Mount Sinai Pain Fellowship Program.**

He has been featured in New York Magazine and **has also been named: Castle Connolly's Top Doctors New York Metro Area** in 2021, 2022.



## Dr. Mourad M., Shehebar

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- Director of the Pain Management Fellowship Program - Mount Sinai Hospital, New York
- Mount Sinai Health System Pain Unit Physician
- Assistant Professor of Anesthesiology, Perioperative and Pain Medicine at the Icahn School of Medicine at Mount Sinai
- Fellow in Pain Medicine at the Icahn School of Medicine at Mount Sinai
- Resident in the Department of Anesthesiology at The Mount Sinai Hospital, New York
- MIR in Internal Medicine at Mount Sinai Beth Israel
- Medical Graduate from George Washington University
- B.A. Summa Cum Laude in Psychology and Biology from Baruch College. New York

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*Thanks to TECH you will be able to learn with the best professionals in the world"*

## Management



### Dr. Arance García, Magdalena

- ♦ Specialist in the Pain Unit. Quirónsalud Infanta Luisa Hospital
- ♦ Specialty in Anesthesia, Resuscitation, and Pain Therapy. Virgen Arrixaca University Hospital. Murcia
- ♦ Specialist in Anesthesiology and Resuscitation. Clinical Management Unit Surgical Block. Virgen del Rocío University Hospital, Seville
- ♦ Degree in Medicine and Surgery. University of Seville

## Professors

### Dr. Casado Pérez, Gloria

- ♦ Specialist in Anesthesiology, Resuscitation and Pain Treatment at the Hospital Universitario Virgen del Rocío. Sevilla, España
- ♦ Area Specialist in Anesthesiology and Resuscitation of the Clinical Management Unit of the Surgical Block at the Hospital Universitario Virgen del Rocío. Sevilla, España
- ♦ Author of numerous publications
- ♦ Graduate in Medicine and Surgery from the University of Seville
- ♦ Master in Pain Treatment by the University of Seville
- ♦ Member of the Andalusian Pain Association and Spanish Pain Society

### Dr. Del Río Vellosillo, Mónica

- ♦ Specialist in the Anesthesia and Resuscitation Service. Hospital Universitario Virgen de la Arrixaca Maternal-Children's Pavilion, Murcia
- ♦ Specialist in the Anesthesia and Resuscitation Service. Hospital Universitario La Fe, Maternal Pavilion, Valencia, Spain
- ♦ Doctor of Medicine. University of Valencia
- ♦ Degree in Medicine and Surgery. University of Valencia
- ♦ Member of the Society for Research in Retina and Vision Sciences

**Dr. Jiménez Pancho, Ana Isabel**

- ♦ Specialty in Anesthesia, Resuscitation, and Pain Therapy
- ♦ Specialist in Anesthesiology, Resuscitation and Pain Therapy at the Virgen del Rocío University Hospital
- ♦ Residency in Anesthesiology and Resuscitation and Pain Therapy at the Fundación Jiménez Díaz University Hospital
- ♦ Graduate in Medicine and Surgery from the University of Seville
- ♦ Master in Pain Treatment by the University of Seville
- ♦ Postgraduate Diploma in the Basic Management of General and Locoregional Anesthesia and Resuscitation by the Catholic University of Valencia
- ♦ Postgraduate Diploma in Anesthesia and Resuscitation in Pathologies of Low Clinical Complexity and Non-Oncologic Pain by the Catholic University of Valencia
- ♦ Member of the Medical College of Seville and the Spanish Society of Anesthesiology and Resuscitation and Pain Therapy

**Dr. Fernández Castellanos, Guiomar Rosel**

- ♦ Specialty in Anesthesia, Resuscitation, and Pain Therapy
- ♦ Specialist Physician in Anesthesiology, Resuscitation and Pain Therapy at the Virgen del Rocío University Hospital
- ♦ MIR in Anesthesiology, Resuscitation and Pain Therapy at the Virgen del Rocío University Hospital
- ♦ Author of 14 medical publications supported by the Spanish Society of Anesthesiology and Resuscitation, the Spanish Society of Transplantation and the Andalusian-Extremadura Association of Anesthesiology, Resuscitation and Pain Therapy
- ♦ University Teacher
- ♦ Degree in Medicine from the University of Granada
- ♦ Official Master's Degree in Clinical Medicine Research by the Miguel Hernández University of Elche

**Dr. Jiménez Vázquez, Paula**

- ♦ Specialty in Anesthesia, Resuscitation, and Pain Therapy
- ♦ Anesthesiologist at the Institute Against Pain Dr. Trinidad
- ♦ Specialist in the Department of Anesthesiology, Resuscitation and Pain Therapy at the Hospital Universitario Virgen del Rocío
- ♦ Specialist in Anesthesiology, Resuscitation and Pain Treatment at the University Hospital of Jerez de la Frontera
- ♦ International Cooperation Medical-surgical and educational care project in the Saharawi refugee camps in Tindouf, Algeria
- ♦ Resident Intern of the Anesthesiology, Resuscitation and Pain Treatment Service at the Hospital de Especialidades de Jerez
- ♦ Collaboration in the Anesthesiology Service at the Hospital Jerez Puerta del Sur
- ♦ Resident Intern in Family and Community Medicine at the Virgen Macarena University Hospital. Sevilla, España
- ♦ Medical Degree from the University of Cadiz
- ♦ Erasmus scholarship at the University of Paris with internship at the Hospital Hotel Dieu
- ♦ Master in Pain Treatment by the University of Seville
- ♦ Master's Degree in Pain from CEU Cardenal Herrera University

**Dr. Ángel Redondo, Lucía**

- ♦ Specialist Physician of the Anesthesia, Resuscitation and Pain Therapy Area
- ♦ Specialist Physician of the Anesthesia, Resuscitation and Pain Therapy Area. Virgen del Rocío University Hospital. Seville
- ♦ Specialty in Anesthesia, Resuscitation, and Pain Therapy. San Pedro de Alcántara University Hospital, Cáceres, Spain
- ♦ Degree in Medicine. University of Seville

# 04

# Structure and Content

The structure of the contents has been designed by the best professionals in the field of Postoperative Acute Pain Management, with a long history and recognized prestige in the profession, backed by the volume of cases reviewed, studied and diagnosed, and with extensive knowledge of new technologies applied to anesthesiology.





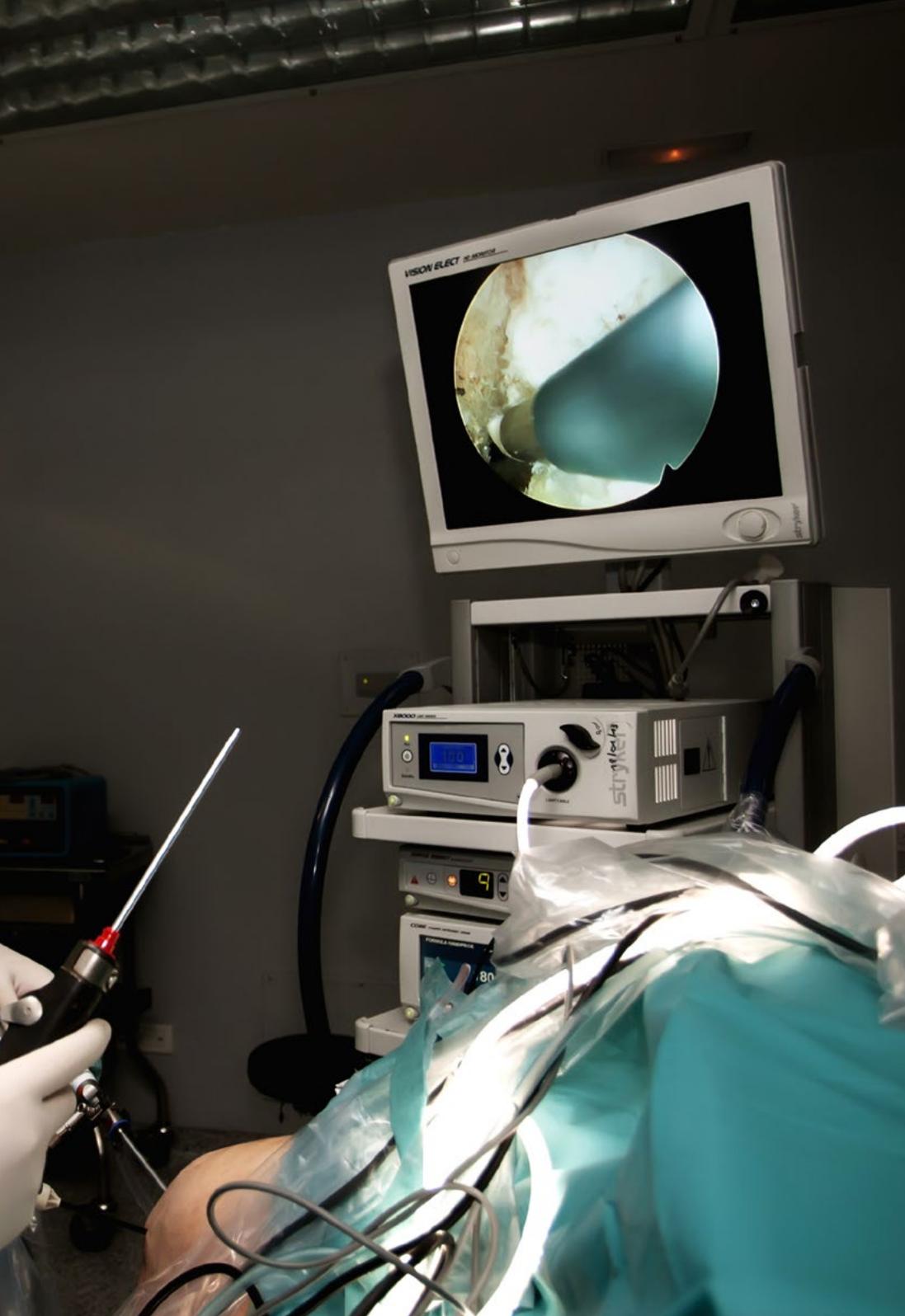
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**Module 1.** Acute Postoperative Pain Considerations. Clinical Situations. Surgical Procedures

- 1.1. Perioperative Strategies and Techniques for the Management of Acute Postoperative Pain I. Epidemiology and Assessment
- 1.2. Perioperative Strategies and Techniques for the Management of Acute Postoperative Pain II: Treatment Management
- 1.3. Acute Postoperative Pain Management in the Elderly Patient and the Patient with Comorbidities
- 1.4. Acute Postoperative Pain Management in Major Surgery Outpatient Unit
- 1.5. Acute Postoperative Pain in Abdominal and Digestive Surgery
- 1.6. Acute Postoperative Pain in Thoracic Surgery
- 1.7. Acute Postoperative Pain in Cardiac Surgery
- 1.8. Acute Postoperative Pain in Orthopedic Surgery and Traumatology
- 1.9. Recommendations for Acute Postoperative Pain Control: Acute Postoperative Pain Units
- 1.10. Considerations in the Chronification of Postoperative Acute Postoperative Pain





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*This program will allow you to advance  
in your career comfortably”*

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. 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.

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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 Considerations in Acute Postoperative Pain. Clinical Situations guarantees students, in addition to the most rigorous and up-to-date education, access to a Postgraduate Certificate issued by TECH Technological University.



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

This **Postgraduate Certificate in Considerations in Acute Postoperative Pain. Clinical Situations** 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 Certificate** issued by **TECH Technological University** via tracked delivery\*.

The diploma 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: **This Postgraduate Certificate in Considerations in Acute Postoperative Pain. Clinical Situations**

Official N° of Hours: **150 h.**



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



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