Postgraduate Diploma

Pain in Locoregional Anesthesia

tech technological university

tech technological university

Postgraduate Diploma

Pain in Locoregional Anesthesia

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

Website: www.techtitute.com/in/medicine/postgraduate-diploma/postgraduate-diploma-pain-locoregional-anesthesia

Index

01 Introduction p. 4

02 Objectives p. 8

03 Course Management p. 12

04 Structure and Content p. 16

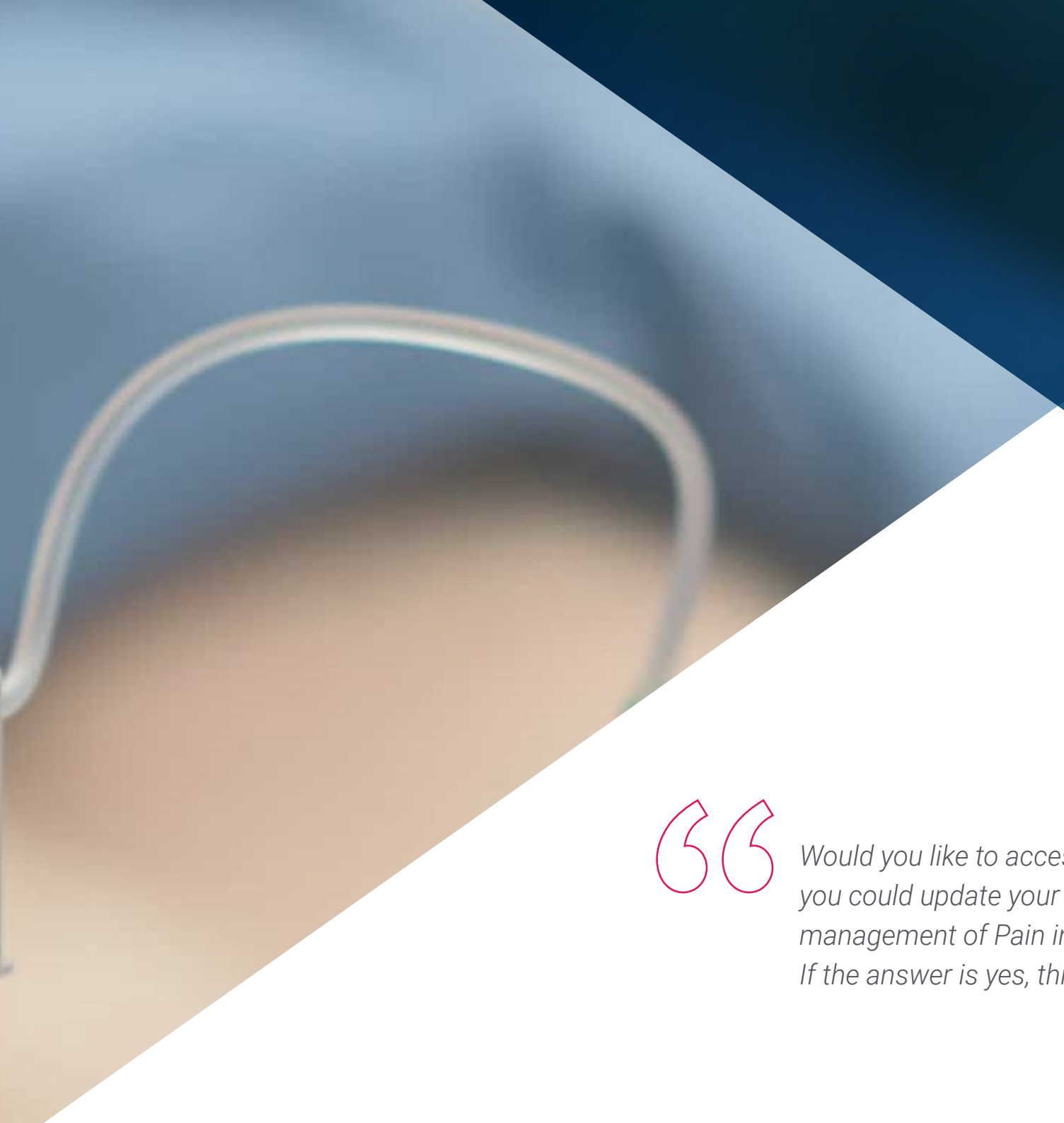
05 Methodology p. 24

06 Certificate p. 32

01

Introduction

The treatment of Chronic and Acute Pain through the use of Local Anesthesia is an increasingly common practice in today's medical field. Thanks to the use of specific drugs and the use of individualized techniques based on the characteristics of the patients, it has been possible to address a greater number of cases, avoiding side effects and post-therapeutic complications. For this reason, TECH Technological University and its team of experts in Locoregional Anesthesiology have launched a complete program focused on updating the professional's practice based on the latest developments in neuraxial blocks and the treatment of Pain, also in the head and neck. All this in a 100% online format and in only six months.



Would you like to access a program with which you could update your practice in the clinical management of Pain in Locoregional Anesthesia? If the answer is yes, this program is perfect for you"

The development of Locoregional Anesthesia has allowed medical professionals to address cases in which the patient suffers a lot of pain through the use of drugs injected into the affected areas, providing relief, often for a long time, as an alternative to surgical intervention. . An example of this is spinal injuries related to discs or the appearance of protrusions in this region, which not only cause acute discomfort, but also affect the motor system, interceding in neuronal-spinal communication. In this way, through the puncture or blockage, inhibitory and anti-inflammatory drugs are injected, relieving pain and pressure in the area, thus contributing to an improvement in the patient's quality of life.

And based on the countless advances that have been carried out in the last decade in relation to treatments and anesthetic application techniques, TECH Technological University has carried out in-depth research to compact, in just 450 hours, all the information that the graduate need to get up to speed in this clinical area. This is how this program emerges, a multidisciplinary academic experience designed by professionals versed in Anesthesiology, Resuscitation and Pain Therapy with which the specialist will be able to delve into the latest developments in neuraxial blocks in the head and neck, as well as the best and most innovative locoregional techniques for the treatment of bone and muscle discomfort.

It is a program made up of a unique syllabus, which is complemented by real clinical cases extracted from current consultations, as well as diverse additional material presented in a multidisciplinary manner. In addition, its convenient 100% online format allows students to do it from wherever they want, without timetables and through any device with internet connection. In this way, the graduate will be able to update their practice from wherever and whenever they want, without having to be subject to in-person classes and restricted schedules, allowing them to combine the program with their professional activity.

This **Postgraduate Certificate in Pain in Locoregional Anesthesia** contains the most complete and up-to-date scientific program on the market. The most important features include:

- Practical cases presented by experts in Locoregional Anesthesiology
- 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 device with an Internet connection

Address the complications of neuraxial blocks through real clinical cases will help you prevent the adverse effects of anesthesia by using the most innovative clinical strategies”

You will have access to 450 hours of the best theoretical-practical content, which has been exclusively designed by a teaching team specialized in Anesthesiology and Pain Therapy"

A program at the forefront of Medicine with which you will perfect your skills in the management of ultrasound in guided spinal, epidural, caudal and paravertebral blocks.

The program also includes a specific module dedicated to the application of Regional Anesthesia for oral and maxillofacial surgery and the latest developments in its current clinical practice.

The program's teaching staff includes professionals from the 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 allow the professional a situated and contextual learning, that is, a simulated environment that will provide an immersive education programmed to prepare 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 student will be assisted by an innovative interactive video system created by renowned and experienced experts.

02

Objectives

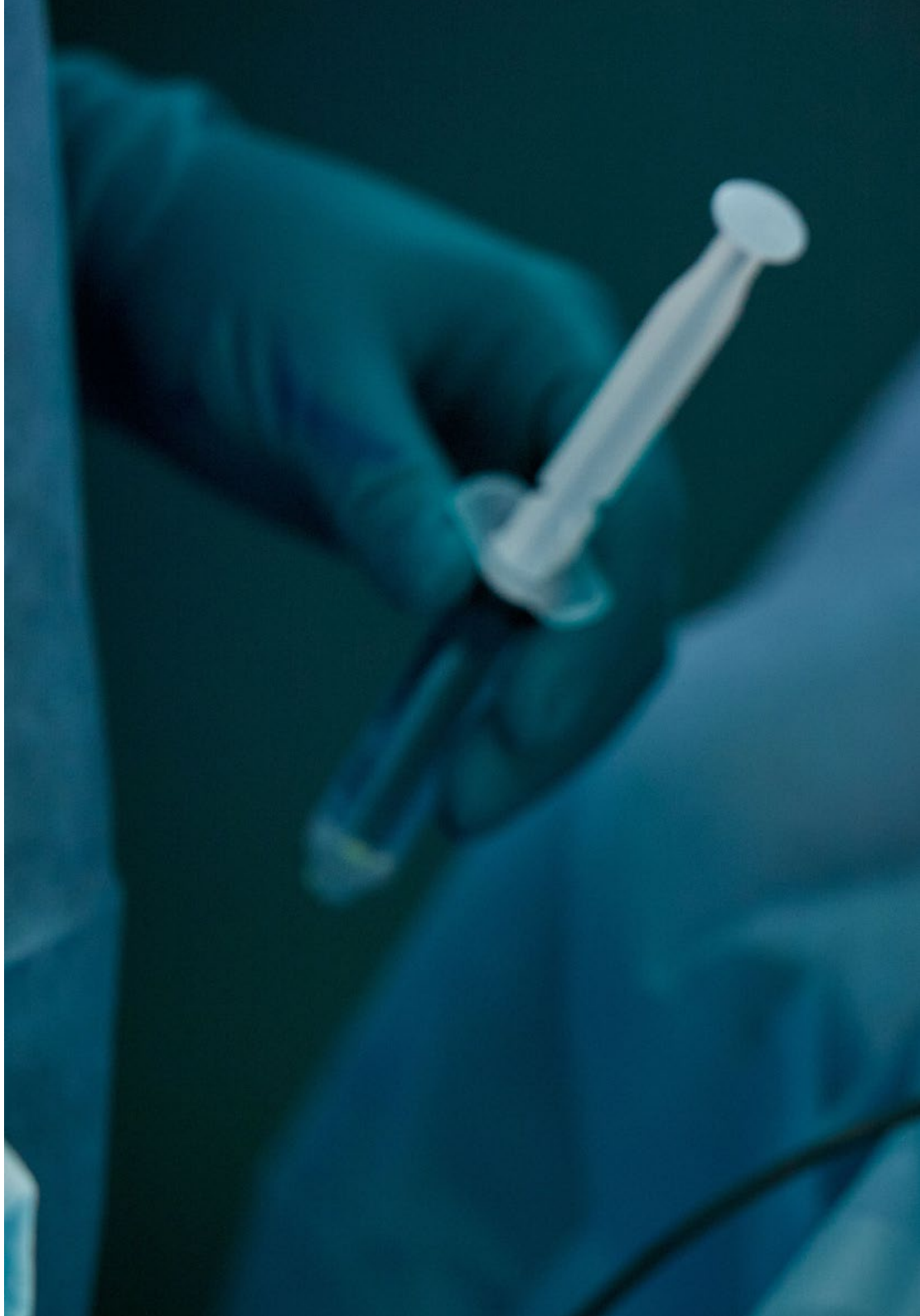
The design of this program has been carried out with the objective that the specialist finds in a single place all the information he needs to update his practice in a guaranteed manner and in just 6 months. Moreover, through access to the Postgraduate Diploma in Pain in Locoregional Anesthesia, you will be able to address each case that is presented to you based on the most innovative and sophisticated clinical strategies that have been developed to date.

TECH will put at your disposal all the resources you need to exceed your objectives guaranteed and in less time than you expect”

General Objectives

- Familiarize the specialist with the latest developments in anatomy, physiology and pharmacology applied to Regional Anesthesia
- Review blockages of the limbs, head, neck, thorax and abdomen, as well as those that are useful for the management of difficult airways
- Review the basic fundamentals of electrostimulation and ultrasound and apply them to the execution of blocks

If among your objectives is to perfect your skills for the application of pulsed RF in the treatment of DN in MMSS, thorax or lumbar region, what are you waiting for to enroll in this Postgraduate Diploma?"



Specific Objectives

Module 1. Neuroaxial Blocks:

- Acquire knowledge of anatomy and physiology regarding neuroaxis blocks
- Identify the different types of neuraxial blocks and establish their indications and contraindications
- Become familiar with the pharmacology applied to neuraxial blocks
- Learn the technique, the effects on the body, the necessary material and the management of spinal, epidural, combined, caudal and paravertebral blocks
- Learn in depth the role of ultrasound in these blockages

Module 2. Head and Neck

- Learn nerve blocks for the face, head and neck, both for anesthetic techniques in the operating room and analgesics in pain units
- Become familiar with the ultrasound image of the different nerve blocks, as well as the response to neurostimulation
- Learn the applications of regional anesthetic technique in head and neck surgeries
- Promote Regional Anesthesia as a complement or replacement to traditional anesthetic techniques in head and neck surgeries
- Usefulness of Regional Anesthesia in the management of difficult airways

Module 3. Locoregional Anesthesia and pain treatment

- Know in depth everything related to Locoregional Anesthesia
- Have the knowledge and implementation of pain management of a certain level
- Provide the fundamental and safety aspects, indications based on Medicine supported by evidence, the use of more advanced imaging techniques, the meticulous description of each of the techniques based on images, algorithms and videos, as well as the resolution of doubts and difficulties that may arise in relation to them

03

Course Management

Not all universities include teaching support in their programs, , formed by specialized teams in the field developed in the program. However, TECH Technological University does. In addition, this university submits candidates to an exhaustive and demanding analysis, resulting in the formation of the best faculty, made up of experts with a wide and extensive professional experience in the sector, as is the case of this program in Locoregional Anesthesiology and Pain Management.

In the virtual campus you will find a direct communication tool so that you can contact the teaching team whenever you need to solve any doubt"

Management

Dr. Burgueño González, María Dolores

- FEA in Anesthesiology and Resuscitation at the HU La Paz
- Anesthesia Coordinator of Cantoblanco Hospital
- Responsible for Surgical Patient Safety at Cantoblanco Hospital
- Specialist Physician at the Virgen del Mar Hospital
- MIR in Anesthesiology, Resuscitation and Pain Therapy at the University Hospital La Paz
- Master PROANES: Official Updating Program in Anesthesiology, Resuscitation and Pain Therapy by the Catholic University of Valencia
- Postgraduate Diploma in Airway Management by the Catholic University of Valencia

Professors

Dr. Zurita Copoví, Sergio

- FEA of Anesthesiology and Resuscitation at the University Hospital La Paz
- Specialist Physician at the Virgen del Mar Hospital
- Resident Tutor at the University Hospital La Paz
- Clinical teaching collaborator at the Autonomous University of Madrid
- Master's Degree in Clinical Management, Medical and Health Care Management
- Master in Patient Management
- European Postgraduate Certificate in Anesthesia and Critical Care
- Member of the Spanish Society of Anesthesiology and Pain Treatment (SEDAR)

Dr. Sancho De Ávila, Azahara

- Free practice anesthesiologist at La Zarzuela Hospital
- FEA of Anesthesiology and Resuscitation at the University Hospital of La Paz
- Free practice anesthesiologist at the University Hospital of La Luz
- Free practice anesthesiologist at Nuestra Señora del Rosario Hospital
- Doctor in Medicine and Surgery from the University of La Laguna
- Specialist in Anesthesiology, Resuscitation and Pain Therapy by MIR examination at the University Hospital Nuestra Señora de la Candelaria

Dr. Canser Cuenca, Enrique

- FEA of Anesthesiology and Resuscitation at El Escorial Hospital
- Specialist in Anesthesiology and Resuscitation at the University Hospital La Paz
- Residency in the Department of Anesthesiology and Resuscitation at the University Hospital La Paz
- PhD in "Neurosciences: Morphofunctional organization of the nervous system"
- Master in Pathophysiology and Treatment of Pain by the Autonomous University of Barcelona
- Master's Degree in Palliative Medicine and Supportive Care of the Cancer Patient

Dr. Salgado Aranda, Patricia

- FEA in Anesthesiology and Resuscitation at the HU La Paz
- Teaching and research experience
- Clinical Teaching Collaborator of the University Hospital La Paz
- PhD from the Autonomous University of Madrid
- Degree in Medicine from the University of Alcalá, Spain
- Master's Degree in Infectious Diseases in Intensive Care
- Member of the Illustrious Official College of Physicians of Madrid

Dr. Vallejo Sanz, Irene

- FEA in Anesthesiology and Resuscitation at the HU La Paz
- Collaborator in Clinical Simulation workshops
- MIR in Anesthesiology, Resuscitation and Pain Therapy
- European Diploma of Anaesthesiology and Intensive Care, EDAIC part I
- Member of the Illustrious Official College of Physicians of Madrid
- Member of the Spanish Society of Anesthesiology and Pain Treatment (SEDAR)

Dr. Rodríguez Roca, María Cristina

- FEA of Anesthesiology and Resuscitation at the University Hospital La Paz
- Teaching and research experience in several university centers
- PhD from the Autonomous University of Madrid
- European Postgraduate Certificate in Anesthesia and Critical Care (EDAIC)
- Member of the Spanish Society of Anesthesiology and Pain Treatment (SEDAR)
- Member of the working group of Chronic Pain of the Spanish Society of Anesthesiology and Resuscitation

Dr. Martín Martín, Almudena

- FEA in Anesthesiology and Resuscitation at the HU La Paz
- Clinical Teaching Collaborator of the University Hospital La Paz
- MIR in Anesthesiology, Resuscitation and Pain Therapy at the University Hospital La Paz
- Master of Continuing Education in "Patient Management"

04

Structure and Content

This program is composed of 450 hours of diverse content, from the syllabus to case studies and additional material presented in different formats: research articles, complementary readings, dynamic summaries of each unit, detailed videos, self-knowledge exercises and much more! All with the aim that the specialist can expand each section in a personalized way and to suit your needs and requirements. In addition, thanks to the 100% online presentation, you can do it from wherever and whenever you want, as well as through any device with an internet connection.

During the 6 months of the program you will have unlimited access to all the content included in this program and you will be able to download it to any device with an internet connection"

Module 1. Neuroaxial Blocks:

1.1. Neuroaxis blocks
- 1.1.1 Definition
- 1.1.2 History
- 1.1.3 Current utility and use

1.2. Anatomy and physiology applied to neuraxial blocks
- 1.2.1 Applied Anatomy
- 1.2.2 Applied Physiology of Camelids

1.3. Pharmacology applied to neuraxial blocks
- 1.3.1 Local anesthetics
- 1.3.2 Opioids
- 1.3.3 Clonidine
- 1.3.4 Corticosteroids
- 1.3.5 Neostigmine
- 1.3.6 Ketamine
- 1.3.7 Others

1.4. Spinal Block
- 1.4.1 Definition and anatomical record
- 1.4.2 Indications
- 1.4.3 Contraindications
- 1.4.4 Necessary Material
- 1.4.5 Single puncture spinal block technique
- 1.4.6 Continuous spinal block technique
- 1.4.7 Effects of blocking and management
- 1.4.8 Specific complications

1.5. Epidural Block
- 1.5.1 Definition and anatomical record
- 1.5.2 Indications
- 1.5.3 Contraindications
- 1.5.4 Necessary Material
- 1.5.5 Exclusive epidural block technique
- 1.5.6 Combined spinal block – epidural technique
- 1.5.7 Effects of blocking and management
- 1.5.8 Specific complications

1.6. Caudal Block
- 1.6.1 Definition and anatomical record
- 1.6.2 Indications
- 1.6.3 Contraindications
- 1.6.4 Necessary Material
- 1.6.5 Technique
- 1.6.6 Effects of blocking and management
- 1.6.7 Specific complications

1.7. Paravertebral Block
- 1.7.1 Definition and anatomical record
- 1.7.2 Indications
- 1.7.3 Contraindications
- 1.7.4 Necessary Material
- 1.7.5 Technique
- 1.7.6 Effects of blocking and management
- 1.7.7 Specific complications

1.8. Neuroaxial blocks in obstetrics
- 1.8.1 Physiological Changes of Pregnancy
- 1.8.2 Neuroaxial Analgesia in Labor
- 1.8.3 Neuroaxial anesthesia for cesarean section, instrumented birth and postoperative analgesia
- 1.8.4 Effects of neuroaxial blocks on the progression of labor and on the fetus
- 1.8.5 Specific complications

1.9. Complications of neuraxial blocks
- 1.9.1 Lumbalgia/back pain
- 1.9.2 Hypotension
- 1.9.3 Accidental dural puncture and post-dural puncture headache
- 1.9.4 Hematic puncture, intravascular injection and local anesthetic poisoning
- 1.9.5 Subarachnoid Injection
- 1.9.6 Intraosseous Injection
- 1.9.7 High spinal block and total spinal block
- 1.9.8 Failed block
- 1.9.9 Neurological Lesions
- 1.9.10. Uriniary Retention

1.9.11. Pneumoencephalon
1.9.12. Pneumothorax
1.9.13. Venous Air Embolism
1.9.14. Infectious complications: spinal abscess, arachnoiditis and meningitis
1.9.15. Complications due to the effect of drugs
1.10. Ultrasound in Neuroaxial Blocks
1.10.1 General principles and limitations
1.10.2 Ultrasound-guided spinal block
1.10.3 Ultrasound-guided epidural block
1.10.4 Ultrasound-guided Flow Rate block
1.10.5 Ultrasound-guided Paravertebral block

Module 2. Head and Neck

2.1. Regional anesthesia for oral and maxillofacial surgery
2.1.1 Introduction
2.1.2 Anatomy of Trigeminal Nerves
2.1.3 Equipment for maxillary and mandibular regional anesthesia
2.2. Nerve blocks in the face
2.2.1 Superficial trigeminal block
2.2.1.1. Frontal Nerve Block
2.2.1.2. Infraorbital Nerve Block
2.2.1.3. Mentonian Nerve Block
2.2.1.4. Ultrasound guided technique
2.2.2 Jaw Nerve Blockade
2.2.3 Mandibular Nerve Block
2.2.4 Regional nerve block of the nose
2.3. Maxillary Regional Anesthesia
2.3.1 Supraperiosteal infiltration
2.3.2 Periodontal intraligamentary infiltration
2.3.3 Superior alveolar nerve block
2.3.3.1. Posterior superior alveolar nerve
2.3.3.2. Medium superior alveolar nerve
2.3.3.3. Anterior or infraorbital superior alveolar nerve

2.3.4 Palatine Nerve Block Major
2.3.5 Saphenous Nerve Block
2.3.6 Jaw Nerve Blockade
2.4. Mandibular Regional Anesthesia
2.4.1 Inferior alveolar nerve block
2.4.2 Saphenous Nerve Block
2.4.3 Mandibular Nerve Block
2.4.4 Mentonian Nerve Block
2.4.5 Incisor Nerves Block
2.5. Regional external ear blocks
2.5.1 Anatomy
2.5.2 Indications
2.5.3 Classic blocking technique
2.5.4 Complications
2.6. Nerve blocks in the Head
2.6.1 Occipital Nerve Block Major
2.6.2 Scalp Block (nerve block of the scalp)
2.6.3 Anesthesia in Craniotomy in Awake Patient
2.7. Anesthesia for Neuroendoscopic Surgery
2.7.1 Orbit and Innervation Anatomy
2.7.2 Surgical Considerations
2.7.3 Perioperative Management
2.8. Anesthetic Techniques for Neuroendoscopic Surgery
2.8.1 Local Anesthesia
2.8.2 Subtenon's or episcleral block
2.8.3 Subconjunctival Anesthesia
2.8.4 Oculoplastics Nerve Blocks
2.8.5 Retrobulbar Anesthesia
2.8.6 Peribulbar Anesthesia
2.8.7 Complications
2.9. Superficial Cervical Plexus Block
2.9.1 General Considerations
2.9.2 Anatomy
2.9.3 Ultrasound-guided block
2.9.4 Nervous Stimulation Techniques
2.9.5 Anesthesia for carotid endarterectomy
2.10. Regional Anesthesia for VAD Management
2.10.1 Introduction
2.10.2 Upper Airway Innervation
2.10.3 Local Anesthesia
2.10.4 Regional Anesthesia
2.10.4.1. Superior laryngeal nerve block
2.10.4.2. Glosopharyngeal block
2.10.4.3. Recurrent laryngeal block
2.10.4.4. Transtracheal Block
2.10.5 Sedation for Intubation in Awake Patient

Module 3. Locoregional anesthesia and pain treatment

3.1. Pain and its Pathophysiological Basis. Types of Pain
3.1.1 Neuroanatomy lesson
3.1.2 Somatic nociceptive pain lesson
3.1.3 Visceral nociceptive pain lesson
3.1.4 Neuropathic pain lesson
3.1.5 Lection of acute pain to chronic pain: peripheral and central sensitization
3.2. Locoregional anesthesia in the treatment of acute postoperative pain
3.2.1 Regional analgesia as a fundamental part of multimodal analgesia in acute postoperative pain
3.2.2 Regional analgesia lesson in shoulder and upper limb surgery
3.2.3 Regional analgesia lesson in shoulder and upper limb surgery
3.2.4 Regional analgesia lesson in shoulder and upper limb surgery
3.2.5 Regional analgesia lesson in foot limb surgery

3.2.6 Regional analgesia lesson in thoracotomy and upper limb surgery
3.2.7 Regional analgesia lesson in breast and upper limb surgery
3.2.8 Regional analgesia lesson in laparotomy and upper limb surgery
3.2.9 Regional analgesia lesson in laparoscopy and upper limb surgery

3.3. Locoregional anesthesia in the treatment of Neuropathy(DN pain)
3.3.1 Diagnostic blocks in the treatment of DN
3.3.2 Pulsed RF in the treatment of DN in upper limbs
3.3.3 Pulsed RF in the treatment of DN of the chest X limbs
3.3.4 Pulsed RF in the treatment of DN Ultrasound limbs
3.3.5 Pulsed RF in the treatment of DN Lumbar limbs
3.3.6 Pulsed RF in the treatment of DN of the MMII X limbs

3.4. Locoregional anesthesia in the treatment of cancer pain and in the scope of palliative care
3.4.1 Invasive techniques as a complement to the treatment of pain in palliative care. Generalities and differential aspects of these patients. Neurolysis
3.4.2 Star ganglion block for pain due to cancer of the brain and EESS
3.4.3 Celiac plexus block for pain due to supramesocolic cancer
3.4.4 Block of the superior and inferior hypogastric plexus and odd ganglion in pelvic cancer pain
3.4.5 Blocking of peripheral and plexular nerves in an oncology patient
3.4.6 Long-lasting epidural catheter in the context of cancer patients
3.4.7 Pumps the Management of Oncology Patients

3.5. Locoregional anesthesia in the treatment of low back pain
3.5.1 Blockade and radiofrequency in lumbar facet syndrome
3.5.2 Regional approach to discogenic pain
3.5.3 Pain due to lumbosacral radiculopathy
3.5.4 Lumbar epidural steroids
3.5.5 RF of the lumbosacral GRD
3.5.6 Lumbar myofascial syndrome
3.5.7 Blockade and infiltration with botulinum toxin of the piriformis muscle
3.5.8 Blockade and infiltration with botulinum toxin of the piriformis muscle
3.5.9 Pain due to changes in the sacroiliac joint. Diagnostic and RF blocking
3.5.10. Epidurolisis and epiduroscopy

3.6. Regional anesthesia and craniofacial pain. Cervicalgia
3.6.1 Trigeminal Neuralgia Gasser's Ganglion RF Block
3.6.2 Other orofacial pain. Gasser's Ganglion RF Block
3.6.3 Cervicogenic headache. Gasser's Ganglion RF Block
3.6.4 Neck pain due to facet pathology. Blockade Diagnoses and RF in Cervical facet syndrome
3.6.5 Cervical discogenic pain. Cervical epidural steroids
3.6.6 Radiculopathy of the lower limbs. Epidural, radicular and RF blocks of DRG of cervical roots

3.7. Regional anesthesia, visceral pain and CRPS
3.7.1 Regional anesthesia in acute and chronic pancreatitis
3.7.2 Regional anesthesia in acute and chronic Renal Lithiasis
3.7.3 Regional anesthesia for chronic pelvic pain in oncology
3.7.3.1. Diagnostic and therapeutic block of the superior hypogastric plexus
3.7.3.2. Diagnostic and therapeutic blockade of Impar Ganglion
3.7.3.3. Pudendal nerve RF block
3.7.3.4. Blockage and RF of the Ilioinguinal and Iliohypogastric Nerves
3.7.4 CRPS
3.7.4.1. ACS Pathophysiology
3.7.4.2. CRPS in the lower limbs: peripheral techniques and on the star ganglion
3.7.4.3. CRPS in the lower limbs: peripheral techniques and on the Lumbar Sympathetic

3.8. Regional anesthesia and Musculoskeletal pain. Thorax and large joints
3.8.1 Regional anesthesia in the painful shoulder. Intraarticular block Suprascapular nerve RF
3.8.2 Regional Anesthesia in Coxarthrosis. Intraarticular block. Denervative techniques
3.8.3 Regional Anesthesia in Gonarthrosis. Intraarticular block. Denervative techniques (N geniculate RF)
3.8.4 Regional anesthesia in myofascial syndrome. Trigger point blocking. Interfascial blocks
3.8.5 Regional anesthesia and discogenic back pain. Cervical epidural steroids
3.8.6 Regional anesthesia and degenerative back pain. Blockade Diagnoses and RF in Dorsal: facet syndrome

3.9. Regional Anesthesia in the IV stage. Neurostimulation and spinal drug infusion
- 3.9.1 Pathophysiological bases of neurostimulation and spinal drug infusion
- 3.9.2 Neurostimulation in the treatment of pain secondary to failed back surgery (FBSS)
  - 3.9.2.1. Stimulation of posterior cords
  - 3.9.2.2. DRM stimulation
- 3.9.3 Neurostimulation in peripheral neuropathies
- 3.9.4 Neurostimulation of posterior cords in anguish and visceral pain
- 3.9.5 Neuroestimulación de raíces sacras en DCP
- 3.9.6 Intra and transcranial stimulation
- 3.9.7 Spinal drug infusion in non-oncological pathology

3.10. Regional anesthesia for labor analgesia (ATP)
- 3.10.1 Physiopathology of pain during the stages of labor
- 3.10.2 Regional analgesia in ATP: epidural analgesia. Modalities of drug administration in ATP
- 3.10.3 ATP and other regional analgesia modalities: combined epidural-intradural analgesia (CIE). CIE analgesia without intradural drug
- 3.10.4 Anesthesia Regional in Cesarean Sections. Epidural Anesthesia. Intradural anesthesia. Anesthesia CIE
- 3.10.5 Special situations in ATP and Regional Anesthesia
  - 3.10.5.1. ATP, Regional Anesthesia and obese patient. Ultrasound. Caudal epidural approach
  - 3.10.5.2. DAP in cesarean section without epidural catheter. Ultrasound Wall Block
  - 3.10.5.3. Transvaginal/transperineal block of the pudendal nerves

Bet on a program at the level of your medical excellence and update yourself based on the most exhaustive and innovative information on Locoregional Anesthesia for the treatment of pain with TECH and this complete program"

05

Methodology

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

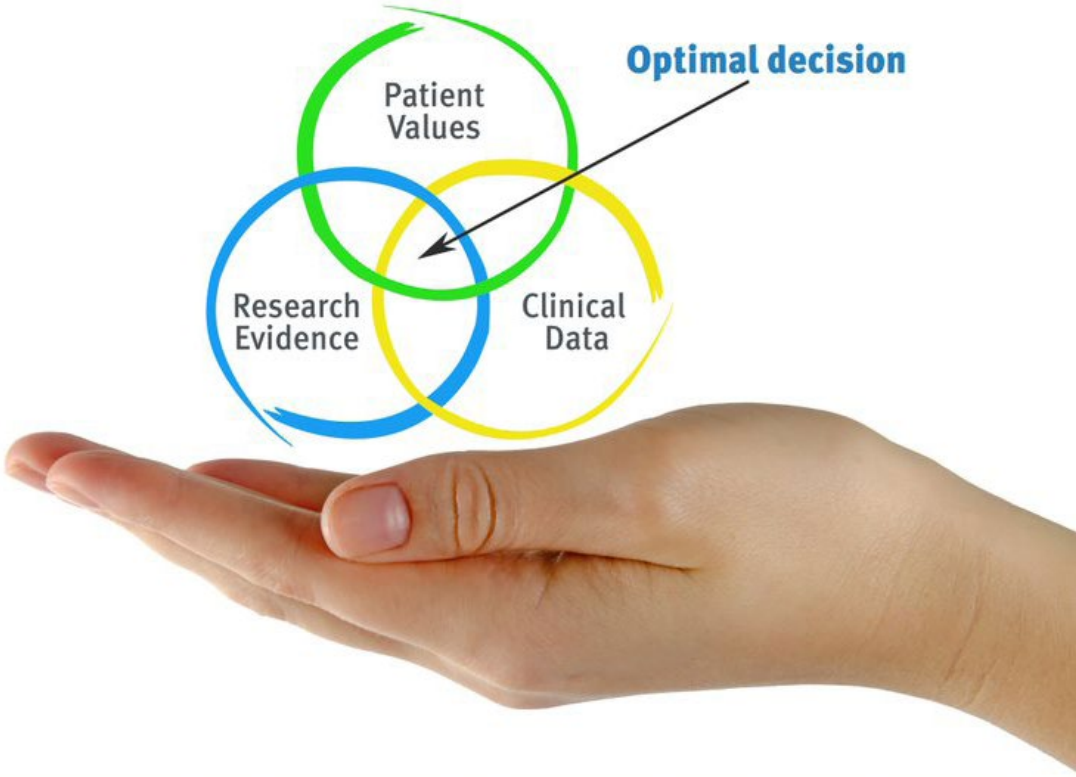
This teaching system is used, for example, in the most prestigious medical schools in the world, and major publications such as the **New England Journal of Medicine** have considered it to be one of the most effective.

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:

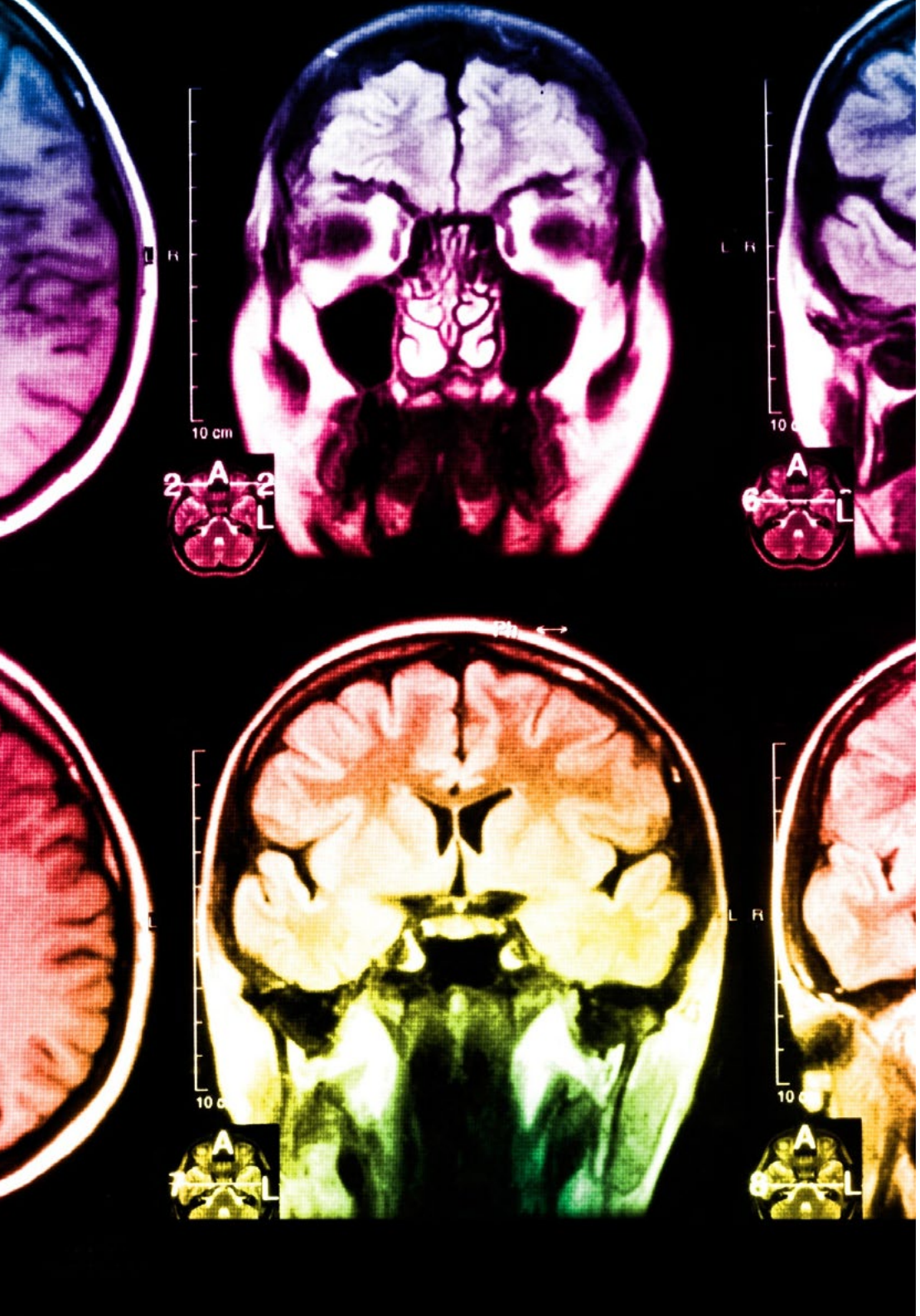
1. Students who follow this method not only achieve the assimilation of concepts, but also a development of their mental capacity, through exercises that evaluate real situations and the application of knowledge.
2. Learning is solidly translated into practical skills that allow the student to better 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.



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.

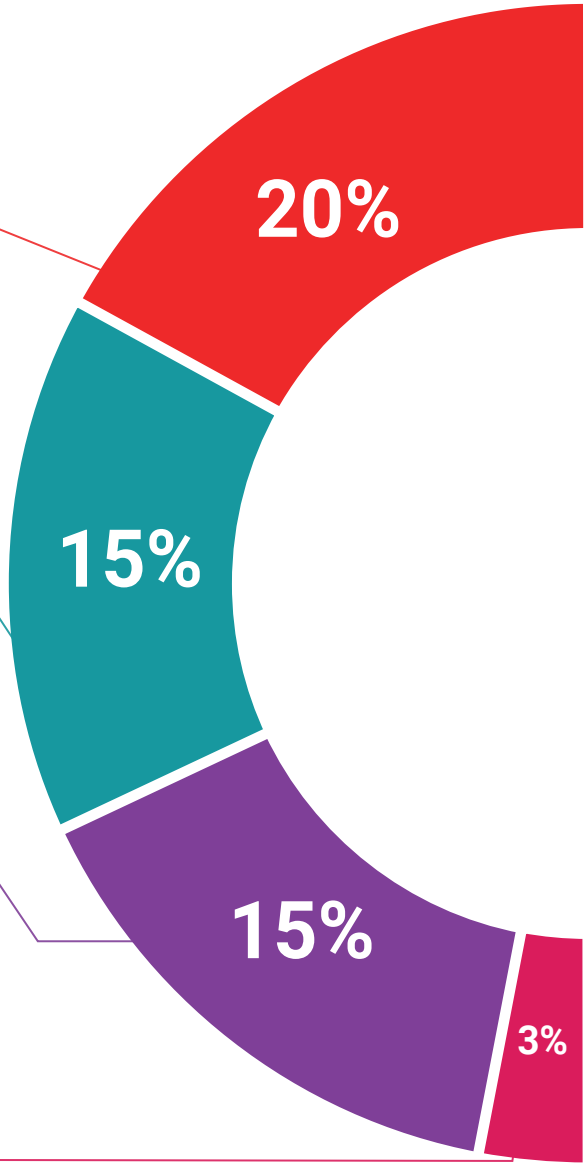
Interactive Summaries

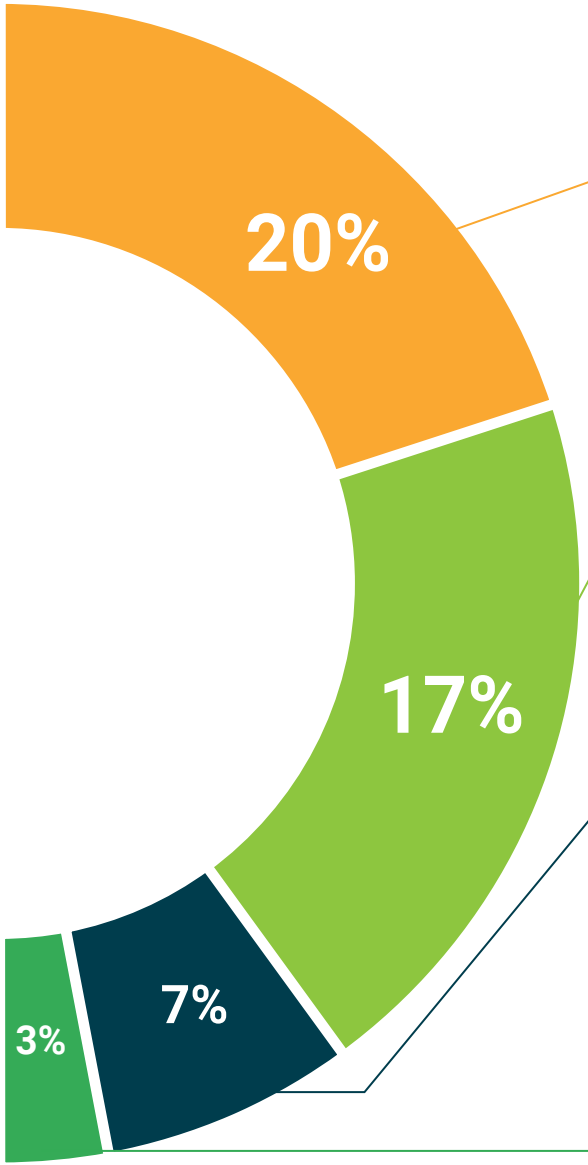
The TECH team presents the contents attractively and dynamically in multimedia lessons that include audio, videos, images, diagrams, and concept maps in order to reinforce knowledge.

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 Diploma in Pain in Locoregional Anesthesia 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 Certificate in Pain in Locoregional Anesthesia** contains the most complete and up-to-date scientific 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 Pain in Locoregional Anesthesia**

Official Nº of Hours: **450 h.**

tech technological university

Awards the following

CERTIFICATE

to

Mr./Ms. _____, with identification number _____.

For having passed and accredited the following program

POSTGRADUATE DIPLOMA

in

Pain in Locoregional Anesthesia

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.

tech technological university

Postgraduate Diploma

Pain in Locoregional Anesthesia

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

Postgraduate Diploma

Pain in Locoregional Anesthesia

tech technological university