FORENSIC MEDICINE IN PORTUGAL

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Introduction

Portuguese forensic medicine has some instances of considerable greatness in its past. When we look at this past, we sometimes feel the loss of those figures we never had a chance to meet and whose example can teach us valuable lessons. But Portuguese forensic medicine has some less worthy aspects in its past, too. 80th should be taken into account. History, the history experienced by mankind, not that which is written or recounted by historians, may not be re-written and I believe that it makes very little sense for us to make value judgments on it. But it is certainly worthwhile knowing it, preserving its memory and drawing lessons from it that are fit for our own times. The best way of honouring the many positive aspects of the past is to project them into the future, taking from them (and the mistakes made) the best teaching, memory and understanding, incentives and energy for what is to come. The past must be viewed with the eyes set on the future. As Miguel de Unamuno, that great figure of medicine said in his last lecture: "The present is the power of the past to become future, and what fails to look forward to tomorrow must remain in the oblivion of yesterday".

In the pages that follow we shall trace the path taken by Portugal in terms of forensic medicine and other forensic sciences serves. We shall concentrate particularly on the present situation and on the glimmering future prospects.

History of forensic medicine in Portugal

Its origins

The first legal texts to contain any rules relating experts in forensic medicine in Portugal date back to the 16th century - to 1538, to be precise. It was then stipulated that two surgeons had to conduct examinations in the case of crimes involving physical injury.

Many other laws emerged in the centuries that followed, detailing aspects relating to the carrying out of investigative examinations until a real forensic medical system was established. This only occurred three hundred years later. Various Portuguese writers broached a range of facets involving investigative intervention in the meantime. The work of one of these Rodrigo de Castro, had a particular impact on the scientific community of the era. It was entitled "Medicus Politicus", and was published in 1614. This book dealt with aspects of medical ethics, but it also contained several parts on forensic medicine. Equally noteworthy is the contribution of the Portuguese physician Zacuto Lusitano to what was one of the first authentic books on forensic medicine: the work by Paolo Zacchia, "Quaestiones medico-legales", dated 1621.

But it was only much later, in the 19th century, that forensic medicine made a qualitative leap in Portugal that actually allowed it to develop, bringing it to the stage where it is today. In the
19th century, indeed, the first university teaching of forensic medicine appeared, with independent courses bearing this title, and the first official forensic medical services were set up in the same century. A number of changes took place thereafter, and throughout the 20th century, always serving to improve the system. They culminated in a throughout reorganization of the entire framework of forensic medicine in Portugal in the transition from the 20th to the 21st century. This consisted of unifying the Portuguese forensic medical services in a single National Institute of Legal (Forensic) Medicine ("Instituto Nacional de Medicina Legal" - INML).

**Teaching of forensic medicine and forensic sciences**

The teaching of forensic medicine in Portugal started towards the end of the 18th century, with the comprehensive alteration of the methods by which medicine was taught in university that took place from 1772 under the so-called "Pombaline Statutes". Some rudiments of forensic medicine in fact came to be taught under general medical topics in the disciplines of clinical practice and surgical practice, where the name 'forensic medicine' did not appear. There was but one faculty of medicine in Portugal at this time, in the University of Coimbra. And it was in this faculty that the very first subject to contain the specific name 'Forensic Medicine' was created, in the wake of the fundamental reform of medical education that took place in Portugal in 1836. It was called "Medicina Legal, Higiene Pública e Policia Médica" (Forensic Medicine, Public Hygiene and Medical Police) and was taught in year 5 of the course. At that time there were two other medical schools in Portugal, the Medical-Surgical Schools of Lisbon and Oporto, where they were located. Forensic medicine was taught in these two Medical-Surgical Schools under the subject of "Clinical Medicine, Public Hygiene and Forensic Medicine". The name 'Forensic Medicine' only came to head this subject from 1863 (when it was called "Forensic Medicine and Public Hygiene").

Over the years the name of the subject was changed a number of times in a series of reforms in the teaching of medicine, but it kept its association with public hygiene. It was in 1901 that the discipline "Forensic Medicine" became fully independent, as a separate subject, with that name.

Forensic Medicine is currently taught in Portugal's seven Faculties of Medicine and Health Sciences, which are in Braga, Coimbra, Covilhã, Lisbon (2) and Oporto (2). All these faculties belong to state universities; private universities in Portugal are not allowed to teach medicine (although dentistry can be taught in the private system).

Forensic Medicine is a compulsory part of the undergraduate course in medicine: though the number of hours taught and its place in the course curriculum varies (it is usually taught in the 4th year). The total number of hours varies between 20 and 65, and essentially covers elements of forensic pathology and clinical forensic medicine, as well as forensic toxicology, genetics and anthropology. The discipline also includes general notions of other areas of forensic and criminal sciences. The teaching of forensic medicine in most of these schools also involves practical classes with the compulsory attendance of a certain number of investigative examinations (forensic autopsies and clinical forensic examinations). At undergraduate level,
forensic medicine is compulsory for all dentistry courses taught in state universities, in a subject usually called forensic dentistry, and in most first degree dentistry courses in private universities. But there are considerable variations in the teaching load and in the practical component of forensic dentistry teaching. These differences are less significant in the theory part.

In addition, all faculties of law in all state universities have to teach forensic medicine, and many of the private universities teach it, too, although the theory and practical teaching loads vary considerably from school to school. In the University of Coimbra, for instance, law undergraduates have to attend at least three post-mortems before they can take their final exam, and Coimbra is the only university to have this requirement for law students.

At undergraduate level forensic medicine is also taught in various other health sciences courses, notably in nursing and health technology degrees (pathological anatomy, clinical analyses, radiology, etc.), though it is not always compulsory and depends on the individual educational establishment’s curriculum. Its teaching is thus much more variable. It should be stressed that there is a growing interest in adding forensic medicine to the curriculum of several undergraduate courses in an increasing number of schools.

Attention is drawn to the fact that the system of university autonomy in Portugal has led several universities to allow students from one degree course to attend subjects in a course that is completely unrelated to the one they are studying (even taught in another faculty), but which they happen to be interested in. This happens in the University of Coimbra, where the Faculty of Medicine’s forensic medicine subject is very popular among students from other degree courses.

At the postgraduate level, Portugal again has quite a choice of training in forensic medicine and other forensic sciences. Master’s courses in forensic medicine and forensic sciences are available in the leading state universities, and these are usually designed in cooperation with the INML and its various forensic services (to guarantee the practical part). But the state universities, and many private ones, also provide courses in specific areas of the forensic sciences, with many courses being available in forensic toxicology, forensic sexology, clinical forensic medicine (including bodily damage assessment for insurance purposes), forensic anthropology, forensic genetics, criminalistics, forensic psychology, and so on. Postgraduate courses are normally open to graduates in any area and are very popular, greatly sought after year after year. It has to be acknowledged that television series such as CSI have helped a great deal here.

It should be noted that, in the area of forensic sciences, Portugal has had a specific postgraduate course in forensic medicine since 1918. The course is known as the Advanced Course in Forensic Medicine. This postgraduate course is taught by the INML in Oporto, Coimbra and Lisbon (which is where the INML had branches), in collaboration with the local medical schools, and was initially meant, and for many years was, solely for medical and law graduates. As time passed it was opened to other professional groups. It set out to provide additional theory and practical training in the various domains of forensic medicine and forensic sciences to anyone interested in the forensic sciences, and lasts one year, covering all the sundry domains. It involves a strong practical component.
Physicians with this qualification are always preferred when public forensic medical services have to sign contracts to carry out investigations in areas where there is a shortage of forensic medicine specialists, as discussed below, or when the courts occasionally need an expert.

Finally, it is worth pointing out that Portugal at the moment has a Higher Education Institute of Criminal Sciences, in Oeiras, near Lisbon. It is run by the Criminal Police (“Polícia Judiciária” and also offers excellent training in the forensic sciences, aiming particularly to provide specialized and constantly updated instruction to officers in this branch of the police. In addition, it cooperates with several other institutions in training and scientific research, both nationally and abroad. There is very good cooperation between this Institute, the universities and the forensic medical services.

Forensic medical services in Portugal

The first public forensic medical services appeared in Portugal at the end of the 19th century, in 1899, to be precise. This was after decades of calls for such a service from, especially, the scientific medical associations and media of the time. These early services, called "morgues" - a name which aroused considerable controversy at the time- carried out post-mortems and clinical forensic medicine examinations. Three morgues were established, each responsible for one region of Portugal: north, centre and south. They were located in Oporto, Coimbra and Lisbon, respectively, and worked with the local medical faculties and medical schools, in an initial link between forensic medicine and the universities that has lasted until today.

The morgues continued until 1918, when they were wound up and the Coimbra, Oporto and Lisbon Institutes of Legal Medicine came into being.

Since then, these services have developed new areas of investigative intervention to cover all domains of forensic sciences and forensic medical practice, in keeping with scientific, technological and doctrinal advances: from post-mortems to clinical forensic medicine in the various spheres of law (criminal, civil, labour, etc.); from toxicology to forensic genetics; from examination of documents to ballistics; from forensic anthropology to forensic psychiatry. All this investigative activity was carried out by them. But from 1957, some of the work done by the then Institutes of Legal Medicine was taken over by the Laboratory of Scientific Police, created in that year. This Laboratory was established in Lisbon, under the jurisdiction of the Portuguese criminal police force. The IMLs retained forensic pathology examinations (including autopsies, forensic histopathology and forensic anthropology), clinical forensic medicine (including expert examinations of victims in civil law, labour law, penal law, forensic psychiatric and psychological examinations, etc.), and forensic genetics and forensic toxicology investigation. The other investigative areas, like document, ballistics, physical-chemical tests, etc., moved to the Laboratory of Scientific Police.

Two more important reorganizations of the national forensic medical structure occurred in the second half of the 20th century, in 1987 and 1998. Examples of the innovations they brought are:
1) The creation of what was at first called the "Conselho Superior de Medicina Legal" (Higher Forensic Medicine Council), and later renamed the "Conselho Nacional de Medicina Legal" (National Forensic Medicine Council) - dissolved in 2007. Its membership comprised representatives of the main bodies linked directly or indirectly to forensic medicine and forensic sciences activity. Its functions consisted of drafting reports on the reforms and operations of the forensic medical system, and on cooperation models for the forensic medical services and other services or institutions, preparing recommendations related to forensic medical and forensic sciences activities, etc.;

2) The provision for the possibility of creating forensic medical offices depending from the institutes of legal medicine to assure the covering of the whole country in terms of forensic medical examinations; an effort to restructure and reassess the forensic medical career and how it was incorporated into the university career structure, and to change the system of appointing medical experts, to try and achieve greater rigor;

3) The strengthening of scientific-technical intervention by the institutes of legal medicine and their role in research and vocational training;

4) The provision for the possibility that the forensic medical public services could also provide services to private entities; the creation of a daily schedule of medical experts to carry out emergency forensic medical examinations;

5) The introduction of a hospital medical career in the forensic medical services; and so forth.

By the end of the 20th century the organizational model for structuring the forensic medical services was based, moreover, on the complete autonomy and technical-investigative independence of the various Institutes of Legal Medicine in Lisbon, Oporto and Coimbra. This was not always a good thing. It led, for example, to different schools of thought involving substantial divergence in terms of technical-doctrinal criteria, investigative methodologies, redacting reports, etc., with inevitable and significant repercussions on the administration of justice, especially in terms of having distinct expert interpretations and appraisals for similar situations, depending on the area of the country in question and the Institute of Legal Medicine responsible for it. This fact, along with a number of others, including the need for improved rationalization of and return from existing technical and human resources and the need for the single coordination of this investigation activity in Portugal, prompted the government decision to restructure Portugal’s forensic medical organization. This was undertaken under the reorganization of the Ministry of Justice which took place at the turn of the millennium, and actually started in April 2001, with the dissolution of the three Institutes of Legal Medicine (Lisbon, Oporto and Coimbra) and their integration into a single National Institute of Legal Medicine, which is described in greater detail below.

Main scientists

The history of Portuguese Forensic Medicine is especially rich in eminent figures in forensic medical and forensic work. Some of them became well-known abroad, in addition to the reputation they acquired on the domestic scene.
Their pioneering role as directors of the first forensic medical services, the 'morgues', put Professors Silva Amado, in Lisbon, Maximiano Lemos, in Oporto, and Lopes Vieira, in Coimbra, firmly in the limelight. And Professors Lourenço Gomes, in Oporto, Almeida Ribeiro, in Coimbra, and Azevedo Neves, in Lisbon (Fig. 1) deserve distinction for the important part they played in developing these first forensic medical services and turning them into institutes of legal medicine.

These were all renowned figures who stood out in various sectors of professional and public life of their times. Almeida Ribeiro, for instance, was also the Rector of the University of Coimbra and Director of the University of Coimbra Hospitals. Azevedo Neves was Rector of the Technical University of Lisbon, Minister for Trade, and Chairman of the Lisbon Academy of Sciences. Azevedo Neves was also one of the persons who contributed most to the development of forensic medicine in Portugal, having left a huge amount of scientific work and having been in charge of publishing the Portuguese scientific journal on forensic medicine that was the most widely distributed and recognized abroad, notably in the Latin countries. He was responsible, too, for constructing the building that currently houses the South Branch of the INML (former Lisbon Institute of Legal Medicine), which opened in the beginning of the third decade of the 20th century. It was then (and still is) one of the finest buildings in Europe dedicated to forensic medicine (Fig. 2).
Many other names were to follow these in the Portuguese forensic medical panorama. In the north, the important part played by Professors Francisco Coimbra and Carlos Lopes while they were at the helm of the Oporto Institute of Legal Medicine is particularly noteworthy. In the centre, Professors Luís Duarte Santos and Fernando Oliveira Sá. In the south, Professor Arsénio Nunes.

But two names in particular stand out in 20th century forensic medicine in Portugal: Azevedo Neves, the most remarkable figure in the first half of the century, and Fernando Oliveira Sá (Fig. 3), the most remarkable and distinguished scientific figure in the second half. In fact, any development in forensic medicine in Portugal with special reference to its technical-doctrinal aspects, its credibility, the start-up and progress of new methods of investigative intervention, the improvement of the quality of investigative practice in various domains, was due to a very great extent to the crucial input of these two Masters. They were shining examples of calm, discreet endeavour, always governed by the interests of the institutes they served, and never by any personal schemes or glory.

Obviously there were other names, too, some of which became even better known abroad than these Masters, but which nevertheless failed to leave any truly striking or significant work as a result of a real, valid contribution to the progress and development of forensic medicine and forensic sciences in Portugal.

For obvious reasons we shall not be mentioning the careers and contributions of anyone of those who are presently guiding the fate of Portuguese forensic medicine, and who are currently serving on the INML's executive board: Professor Teresa Magalhães, director of the North branch, Prof. Francisco Corte-Real, director of the Centre branch, Prof. Jorge Costa Santos, director of the South branch, and the author of this article, Chairman of the INML since its creation.

**Portuguese textbooks and journals in forensic medicine**

Unfortunately no books have been published recently by Portuguese authors, in Portuguese, which could be regarded as texts of reference in the general field of forensic medicine and forensic sciences. There are only a few odd publications, generally compilations of articles whose quality is, as a rule, quite average and a few books which, though of better quality, more interest and practical use, tend to deal with very specific aspects of this science. We have, for instance, the book by Professor Teresa Magalhães on "Maus Tratos em Crianças e Jovens" (Child and Adolescents Abuse), or the book, published in English, entitled "Forensic
Anthropology and Medicine”, of which two of the coordinators are Portuguese, but all the contributors are from other nationalities.

It should nonetheless be noted that Portugal has had a rich tradition in terms of textbooks on forensic medicine, especially in the first half of the 20th century, but unfortunately this tradition has not been continued. Among these books from the past, mention must be made of two works which were the first in Portuguese to contain features similar to those characterizing today's writings on forensic medicine. These are the "Tratado Elementar de Medicina Legal" (Elementary Treatise on Forensic Medicine), published in 1858 by Professor Januário Peres Furtado Galvão, and the "Tratado Elementar de Medicina Legal" (Elementary Treatise on Forensic Medicine), published in 1858 by the same author and Professor José Ferreira de Macedo Pinto. Both textbooks were studied by several generations of students.

The "Manual de Medicina Legal" (Handbook of Forensic Medicine) and "Medicina Judiciária e Pericial. Jurisprudência Médica" (Investigative and Judicial Medicine. Medical Jurisprudence) by Professor Adriano Xavier Lopes Vieira, were the two first books in forensic medicine published in the 20th century (1903 and 1908, respectively). Also conspicuous for their high quality are two books which are still read with special pleasure, and profit, today: "Prática de autópsias: técnica e diagnóstico" (Post-mortem practice: technique and diagnosis), and "Guia de Autópsias" (A Guide to Post-mortems), both published by Professor João Alberto Pereira de Azevedo Neves, respectively in 1909 and 1930. The "Guia de Perícias Médico-Legais " (Guide to Forensic Medical Investigation), by Professor Carlos Ribeiro e Silva Lopes deserves a special mention. First published in 1942. it was renewed and republished a number of times until 1982 and always sold out. This is without doubt the most successful book on forensic medicine so far published in Portuguese, and was (and in some ways still is) a reference, in some aspects, for many practitioners.

Textbooks of note published in the second half of the 20th century include "Medicina Legal" (Forensic Medicine), published in 1968 by Professor Luís Augusto Duarte Santos, a compilation of some particularly interesting texts, and, especially. "Clínica Médico-Legal da Reparação do Dano Corporal em Direito Civil" (Clinical Forensic Medicine in Compensation for Bodily Damage in Civil Law) dated 1992, by Professor Fernando Oliveira Sá. This latter work had an extraordinary impact on the investigative methodology followed in Portugal with respect to the assessment of bodily damage in civil law, completely changing the prevailing scenario in Portugal and becoming an irrefutable reference for everyone working in this investigative area in all Latin countries.

Other books were published by other forensic medicine experts, especially compilations of articles, like those by Professor José Pinto da Costa, for example, but in the view of the author they are only of very limited value. They do not represent or offer any meaningful contribution to the development of this area, and in some cases they contain opinions that are at least controversial and open to argument.

Nowadays, the reference books most often used in the study of forensic medicine in Portuguese universities, to train forensic medical interns, and even to back up the specialists in this area, are basically "Knight’s Forensic Pathology", published in 2004 by Pekka Saukko and Bernard Knight, the "Encyclopedia of Forensic Sciences ", published in 2000 by Jay Siegel,

It should be stressed, however, that a new book on Portuguese forensic medicine that could very well be used as a work of reference in national bibliography is currently under preparation, and involves several practitioners in forensic medicine in Portugal, including the author of this article.

The scene in terms of forensic medical and forensic journals is not very inspiring at the moment, either. After an era when there used to be some very good Portuguese journals, which were even references internationally, like "Arquivos de Medicina Legal ", edited by Prof. Azevedo Neves, Portugal no longer has a national journal of a general nature in this sphere. There have been several attempts over the years to launch a Portuguese journal, several of them, it should be noted, instigated by Professor José Pinto da Costa, such as the "Jornal de Medicina Legal" and the "Boletim de Medicina Legal e Toxicologia Forense". But they always failed, probably due to the lack of quality which they did not manage to remedy.

At the moment only the "Revista Portuguesa do Dano Corporal" (Fig. 4) is published, and this journal, which is published annually, is specifically in the area of Clinical Forensic Medicine and is of sound quality. It was first published in 1990 by Professor Fernando Oliveira Sá, and has continued since then, with considerable success. It is widely read in all Portuguese and Spanish speaking countries, including those in South America and Africa.

However, a new journal entitled "Revista Ibero-latino-americana de Medicina Legal e Ciências Forenses", in which each article is published simultaneously in Portuguese or Spanish and English, will probably be published in Portugal very soon, in collaboration with the National Institute of Legal Medicine.
History of forensic medicine in Portugal

Status, competences and structure of the INML

As mentioned earlier, Portugal has had a single National Institute or Legal Medicine since 2001. It is based in Coimbra and has three branches, in Oporto, Coimbra and Lisbon. These are known as the north, centre and south branches (they are the former Institutes of Legal Medicine). There is, in addition, a network or 31 Forensic Medical Offices (called in Portuguese "Gabinetes Médico-Legais") scattered throughout the country and these, together with the branches responsible for them, are able to cover the whole country in terms of forensic medical examinations, providing the investigative services explained below.

The INML has the legal status of public institute, working under the indirect administration of the Government (that is to say, it is supervised by the Minister for Justice), while it enjoys administrative and financial autonomy and has its own patrimony. It has also the nature of a Government laboratory, exercising its powers jointly with the member of the Government responsible for science, technology and higher education. The INML's mission is to ensure forensic expertises, scientific training and coordination in the area of forensic medicine and other forensic sciences, overseeing and guiding the operations of its forensic services and the experts recruited to conduct examinations. It operates in conjunction with higher education establishments, particularly with medical schools (public and private), through protocols in the areas of teaching, training and scientific research.

The INML can also sign protocols with hospitals and other health services, public and private, for the technical-scientific training of any staff engaged in forensic work, the joint carrying out of research projects, the use of these services' premises and facilities to set up forensic medical offices, and to carry out any forensic investigations which lie within the INML's jurisdiction. These protocols can also be designed to develop joint projects for research and for the cooperation of the staff of these health institutions in the area of forensic medical tests and investigations requested of the INML.

The National Institute of Legal Medicine (INML) is legally regarded as the national institution of reference within its sphere of competence, which basically involves the following:

- Contributing to the definition of national policy in the area of forensic medicine and other forensic sciences;
- Cooperating with the courts and other services and entities that operate in the justice administration system, performing tests and conducting forensic examinations as requested, and providing specialist technical and laboratory support, within its powers;
- Superintending the organization and management of the forensic medical services in Portugal;
- Planning and implementing actions for training, managing and assessing the human resources in the sphere of forensic medicine and other forensic sciences;
- Adopting quality guarantee programmes for the tests and forensic investigations within its jurisdiction and advocating the standardization of their methodologies, techniques and expert reports, issuing technical-scientific directives on these issues;
- Directing, coordinating and auditing the technical-scientific activities of the branches, the forensic medical offices and the experts hired to undertake investigative work;

- Coordinating, guiding and supervising activities related to forensic medicine and other forensic sciences in Portugal;

- Encouraging training, scientific research as well as the dissemination of forensic medical work and that of the other forensic sciences, and developing educational cooperation with other institutions;

- Providing services to public and private entities, and private individuals, in domains involving the application of forensic medical knowledge and that of the other forensic sciences;

- Securing cooperation with other kindred bodies abroad, and with international organizations.

**INML's structure**

The present forensic medical system in Portugal stipulates that there are three bodies in the INML. These are the executive board, the forensic medical council and the auditor. We will dedicate a few words to each of them.

The function of the Executive Board is, as its name implies, to direct the Institute. It has a chairman and three members, who are the directors or the north, centre and south branches. The Chairman is chosen by the Prime Minister and the Minister for Justice, and is appointed directly by them. He/she is expected to be a university professor specialized in forensic medicine.

The Chairman selects the directors of the three branches, who are the other members of the Institute's Executive Board. They, too, should by law be preferably professors of forensic medicine or heads of medical departments whose profile, training and experience are appropriate to their duties.

Advice about their choice may be taken from the academic committees of the faculties of medicine in which they teach. The Forensic Medical Council is one of the oldest bodies existing in the Portuguese forensic medical system (created in 1918). It is currently headed by the chairman of the INML's executive board and its membership comprises the directors of the North, Centre and South Branches of the INML, a representative of the regional disciplinary committees of each regional section of the National Medical Association ("Ordem dos Médicos"), plus 11 professors of medicine from various areas, put forward by faculties of medicine (Clinical Surgery, Clinical Medicine, Obstetrics and Gynaecology, Pathological Anatomy, Ethics and/or Medical Law, Orthopaedics and Traumatology, Neurology or Neurosurgery, and Psychiatry), and 2 law professors (one from criminal and one from civil law), put forward by faculties of law. The forensic medical council can further request the cooperation of professors from other medical specialties or other higher education establishments, or other experts, who may also be asked to attend its meetings. The secretary of the forensic medical council is a person it appoints, proposed by the chairman, preferably an assistant professor of forensic medicine.
The Forensic Medical Council has a range of functions:

1) Opining on ethical questions in the areas of research and forensic activity done by the forensic services;

2) Monitoring and assessing the INML's investigative work, suggesting measures it regards as appropriate to the due performance of its tasks and reporting on reforms to be undertaken in the forensic medical system or which may have implications for its operations;

3) Reporting on the cooperation models the forensic medical services have with other services or institutions; opine, either on its own initiative or at the request of the chairman of the executive board, on matters related to the powers of the Institute and make recommendations in the sphere of forensic medicine.

But the main function of the Forensic Medical Council is to issue expert reports on technical and scientific issues. It will do this, for example, whenever a court is faced with cases involving medical facts, whose interpretation is raising doubts, especially when there are conflicting views. The law states that the technical-scientific reports issued by the forensic medical council are not subject to revision. They represent the definitive view of the council on the specific question put, unless new elements are presented which offer grounds to change it. These reports are, therefore, the final word on the matter in terms of expert opinion, and the court’s decision will usually be based on their content. So that the Council is not overwhelmed by requests from the courts, this technical-scientific and ethical consultancy can only be requested by the Government minister responsible for justice, the Higher Judicial Council, the Attorney-General or the chairman of the INML's executive board. Cases of medical responsibility are today the main situations presented to this Council.

Finally, the other body, the auditor, is appointed by the government and whoever is selected is responsible for inspecting the INML's operations, particularly from the financial standpoint.

**INML's central services**

The various Central Services function in the Institute's headquarters, and are concerned with the coordination and realization of the INML's functions. One of these central services is the Department of General Administration, which takes care of the administration of the INML's personnel, financial and informatics' resources. A Human Resources Division, a Financial Division and an Informatics Division operate under it. Another of these Central Services is the Department of Research, Training and Documentation, which supports and runs the areas specified in its name. The head of the Department of Research, Training and Documentation is also by law preferably recruited from university teaching or research staff in the area of Forensic Medicine.

The third central service is the Legal Advice Department, which gives all the legal help needed for the INML to operate properly. The Executive Board and the Forensic Medical Council also function at the headquarters.
Forensic services of the INML and forensic medical investigation

Portugal's forensic medical services consist of three branch offices and 31 Forensic Medical Offices, as mentioned earlier. Each Branch is responsible for the forensic medical investigation work in its local area, and each has a number of Forensic Medical Offices under it. The branches work closely with the medical faculties, and are, indeed, inseparable: the university forensic medicine section functions within the forensic medical public services of the National Institute of Legal Medicine. And, as mentioned above, the directors of the branches and the chairman of the Executive Board are professors responsible for teaching forensic medicine in the medical faculties in their regions.

There are 4 investigative technical departments in the branches. These are: the Forensic Pathology Service, responsible for conducting post-mortems, forensic histopathology, embalming, and forensic anthropology investigations; the Clinical Forensic Medicine Service, which deals with investigating and examining people to describe and assess their psychophysical injuries and sequels, in various legal domains (criminal, civil and labour law), and carries out also psychiatric and psychological investigations; the Forensic Toxicology Service, which carries out all kinds of chemical and toxicological investigations and laboratory tests; and the Forensic Biology and Genetics Service, which handles genetic identification investigations and tests, especially in terms of the biological investigation of paternity, individual identification, biological criminalistics, and so forth.

The heads of the medical technical departments (Forensic Pathology and Clinical Forensic Medicine) are chosen directly by the directors of the branches, and those of the other departments are chosen via open competition, and once again people who are simultaneously involved in teaching have preference, by law, to be appointed.

Only forensic pathology (autopsies, embalming, and anthropology) and clinical forensic medicine examinations are conducted in the forensic medical offices. This is to avoid people and corpses having to travel to the branch premises. The laboratory examinations are thus all concentrated in the three branches, and all specimens/samples are sent to them, using means which guarantee the chain of custody. To prevent duplication of resources, these forensic medical offices have their premises in hospitals, through cooperation protocols signed between the INML and each hospital, but they remain independent of the health service, and answer only to the INML.

Note that the law establishes that the INML is the solely responsible for medico-legal investigations requested by the courts. These forensic medical investigations have to be carried out by law in the INML's branch offices and forensic medical offices. Only in exceptional circumstances, if this is utterly impossible or if these facilities do not have experts with the necessary training, or lack the physical conditions to conduct them, can they be carried out by third parties (public or private) recruited or proposed by the Institute. The INML may therefore legally assign to or acquire from other public or private bodies, in Portugal or abroad, services relating to any forensic tests and investigations it is asked for, and also relating to holding courses and other training actions.
The branches and forensic medical offices of the Institute can receive complaints about crimes within the scope of their investigative work, opening a judiciary procedure, and must send such information to the Public Prosecutor’s office as soon as possible. Victims do not need to go to Police or Court to make complain and began a judiciary procedure, and can go directly to the medical forensic services.

Whenever it is found necessary for the proper execution of forensic medical investigations, the Institute's branches and forensic medical offices can take whatever precautionary measures are urgently needed to secure evidence. In particular they can examine, collect and preserve items, without prejudice to the legal powers of the police undertaking the investigation.

The law also establishes the cost of all the tests and investigations undertaken by the INML, or referred by it to other bodies. There is a list of such charges, proposed by the Executive Board and approved by the Minister for Justice, and payment is made even when the investigations are requested by the Courts. All expertises made by the INML are payed. The cost of the investigations then becomes a cost in the action and is borne by the person or entity convicted by the court. When no guilty party is identified, or if the guilty party is insolvent, the Government bears the cost (thereby ensuring and safeguarding that justice is free to victims), but in other cases the State manages to recover the money spent on forensic investigations. The INML does not get any funding from the State, therefore, and survives solely on the revenue it generates through its investigative work, operating as a company.

Besides its mission of cooperation with the courts in administering justice, carrying out all the investigative tests and examinations needed for this, the INML also conducts forensic expertises at the request of public and private bodies, and private individuals. These tests and examinations cost exactly the same as those requested through the courts.

The Portuguese forensic medical system assures the expert complete freedom to carry out whatever additional complementary tests he/she sees fit to arrive at a full picture of the situation. The judge may not interfere in the decision as to which expert or experts are to conduct the tests or about which supplementary tests should be carried out, and the court must pay for all those that are actually carried out (histology, toxicology, genetics, forensic entomology, etc.). Obviously the expert should only ask for tests that are scientifically justified in the circumstances, and may be punished if any abuse is found in tests that he/she regularly requests.

Each expert has complete technical-scientific freedom, specifically in terms of working out what to do in each situation, and what conclusions to draw, and is responsible for the investigations, reports and opinions he/she prepares. The experts are nevertheless obliged to respect and follow the standards, models and investigative methodologies employed by the Institute, and to respect the recommendations arising from the technical-scientific supervision of the services. They may also be inspected from time to time to appraise the quality of their work. The law states that, in exceptional circumstances, when urgently required by the service or when it is impossible for the expert who carried out the investigative work, the directors or coordinators of the relevant services may entrust the preparation or completion of the respective report to another expert, provided he/she is duly qualified for the purpose.
As part of their investigative duties, the doctors and other technical staff have access to the relevant information, viz. the content of the proceedings, which must be given to them promptly by the authorities so as to enable them to grasp the facts and undertake a more comprehensive and rigorous examination.

The chairman of the Institute, the branch directors, the heads of the technical services or the coordinators of the forensic medical offices can, by law, ask hospital clinical services, insurance company clinics and other public and private entities directly for clinical information relating to anyone examined in forensic medical cases for clinical information. This information must be supplied within 30 days.

By law, the INML can also ask public offices and authorities (in particular, the Ministry of Health) and private entities directly for whatever details it needs to fulfill its functions in the context of any ongoing legal actions.

In the areas of the branches and forensic medical offices where there are enough forensic medical experts, there is a daily roster of medical experts to deal with urgent cases. This roster works on a 24-hour on-call basis. Portuguese law holds that urgent forensic medical examinations are those where it is imperative to ensure that victims of violence are seen very quickly, with a view to collecting traces and samples that may otherwise be lost or undergo rapid change, and to examine the scene in cases of death by murder or manslaughter, or where this is suspected. The experts who are in the pool each month receive an extra allowance.

After the traces, biological or anatomical specimens have been examined the expert will collect and seal any sample that may possibly need to be investigated further, if the items and products examined allow this, and then destroy what is left. The sample will be kept in the forensic service for two years, after which period it may be destroyed unless the court has ordered otherwise in the meantime.

According to the law relating to the forensic medical services, no-one can refuse to undergo any forensic medical examination when this is found to be necessary for the inquiry or the fact-finding of any case, as long as it is ordered by the competent judicial authority. Furthermore, any person duly notified or called upon by the director of one of the Institute's branches or the coordinator of the forensic medical office to conduct an examination must be there on the appointed day, time and place. The competent judicial authority is informed of the failure to do so, for due purposes. The person examined can be accompanied by a friend, a relative or someone he/she wants during this examination. The competent judicial authority can attend these examinations if it deems necessary, but this only happens very rarely.

Examined persons who live outside the area of jurisdiction of the branch of the Institute, the forensic medical office or specialist university or health facility where they have gone for their forensic medical examination can ask for the reimbursement of their expenses, and this amount will be added to the costs of the legal action, to be paid later by the party convicted, or borne by the government if there is no conviction of the convicted party is insolvent.
It is stressed that the INML has a video-conferencing system which links it to all the courts in Portugal, so that the experts can give their testimony from the forensic medical services, without having to go to court, whenever the judge feels they can be heard by this system. The time spent on this by the expert is also charged to the court, in line with the official list of charges, and this again is entered as a legal cost.

According to the law, forensic medical post-mortem examinations take place in cases of violent or unexplained death, unless there is sufficient clinical information which, associated with other elements, enables the Public Prosecutor to safely decide that there is no evidence of a crime. In this case the judge can waive the need for a post-mortem. But this can never happen in cases of violent death in the workplace or in road traffic accidents which result in instant death. Under the current law, a forensic medical post-mortem can also be dispensed with in cases when conducting one presumes contact with particularly significant risk factors that could seriously compromise public health. In these cases the chairman of the Institute’s executive board can authorise the waiving of a post-mortem by sending written information to the competent judicial authority as soon as possible.

When a post-mortem is ordered, it can be held once death has unequivocally been confirmed, and it must be scheduled with the forensic medical service as quickly as possible, depending on the capacity of the service. As a rule, post-mortems are carried out by one expert physician assisted by a technician, but very often more than one expert doctor takes part. The presence of two doctors is required in murder cases, when crime is suspected and in complex cases.

It should be noted that the forensic services and police criminal investigation departments work very closely together, and the latter often come to the forensic medical services, being frequently present in post-mortems, for example.

More information about the structure of forensic medical services in Portugal can be obtained from the INML website: www.inml.mj.pt.

Besides the investigative services provided by the INML, which account for most of the forensic examination work that takes place each year in Portugal (more than 150,000 examinations were conducted by the INML in 2006), there is also a Laboratory of Scientific Police ("Laboratório de Polícia Científica" - LPC). This operates under the wing of the criminal police force ("Polícia Judiciária") and has powers only in the sphere of criminal investigation. This laboratory, established in 1957, retained some of the investigative areas that had up to then been within the scope of the Institutes of Legal Medicine, too, and which are now only in its jurisdiction, such as the examination of documents and ballistics. The LPC also embraces two spheres of activity which it shares with the INML, and these are forensic genetics and toxicology. As a rule, in this type of investigation the forensic medical services undertake the examination of any organic traces taken from the victims it has examined, while the LPC takes charge of the traces and specimens collected from the scene, and they subsequently share their information. In fact, the NLM laboratories carry out a great many tests on traces and specimens taken from the scene, cooperating closely with the LPC and helping it to respond more promptly to the growing number of requests, even those for testing and examining other kinds of samples and traces. They are actually responsible for most of the investigative examinations carried out in these circumstances in Portugal.
Own national society

Interestingly enough, Portugal had two scientific associations in the area of forensic medicine for a number of years. This was due to a somewhat divisive (and sometimes even hostile) situation that prevailed in the 1980s and 1990s in Portuguese forensic medicine. Conflicts sometimes arose because of people’s desire for protagonism, which led to a wholly undesirable situation, especially in a small country like Portugal, with a fairly small number of forensic experts.

One of these associations was called the "Sociedade Médico-Legal de Portugal" (Medico-Legal Society of Portugal). It was set up in Oporto by the director of what was then known as the Oporto Institute of Legal Medicine. This association was initially known as the "Sociedade Médico-Legal do Porto" (Oporto Medico-Legal Society), and changed 'Oporto' for 'Portugal' maybe for the fact that the directors of the then Institutes of Legal Medicine of Lisbon and Coimbra, set up another association, called the "Sociedade Portuguesa de Medicina Legal" (Portuguese Society of Legal Medicine), unhappy with the local name that had been chosen for the society established by their colleague in Oporto, and with the situation it was then experiencing. The existence of two scientific associations in the same area in such a small country as Portugal was due, it is repeated, to various disagreements between the people in charge of Portugal’s forensic medicine at the time. And some of these differences worsened as time passed. All of these leading figures in Portuguese forensic medicine of the time are now retired, and the disagreements of the period have now disappeared. These two scientific associations have been completely inactive for at least 7 years. They did, in fact, become defunct naturally, with the development that came from the creation of the INML, though nothing had been deliberately done to bring this about.

Meanwhile, a new scientific society is now being performed, probably called "Sociedade Portuguesa de Medicina Legal e Ciências Forenses" (Portuguese Society of Legal Medicine and Forensic Sciences). It is now taking its first steps and hopes to attract not just forensic medical experts, but experts in other domains of the forensic sciences, too. This will be the society that will bring together everyone who is truly committed to the genuine progress of forensic medicine and the forensic sciences in Portugal.

Annual meetings

A National Forensic Medicine Conference has been organized every year since the National Institute of Legal Medicine was created. This has always been held on the second weekend of November and it rotates between the centre, south and north of Portugal, being organized by one of the forensic medical services in each of these regions. The latest advances in doctrine, technology and science are analyzed, and forensic issues are reviewed at the annual conference. In addition, practical cases are presented and discussed, and emphasis is laid on sharing experiences and thoughts. Usually eminent international figures are invited to give a lecture on his/her special area of interest. These conferences are always preceded by workshops on specific topics. Information on the annual conferences can be found at www.inml.mj.pt.
As well as this annual conference, every four years Portugal and Spain organize one joint scientific meeting on Forensic Medicine, called the "Congresso Ibérico de Medicina Legal", and another one in the specific area of Assessment of Bodily Damage. This meeting is called the "Congresso Luso-Espanhol de Avaliação do Dano Corporal", and is also held every four years.

Current developments

It could be said that Portuguese forensic medicine is in a particularly positive and expanding phase. The creations of the INML and its development have had really encouraging and positive results. What is more, everyone directly and indirectly associated with forensic and forensic medical investigation is agreed that things are progressing well, including judges, lawyers, insurance companies, victims, etc. This is recognized abroad, too. Apart, of course, from the inevitable occasional voices, mostly heard from those who saw the loss of positions or influences (real or imagined) in the creation of the INLM.

The expansion of the INLM will certainly continue, namely because the Institute is seeing its powers increased, especially now that it has achieved the status of government laboratory, and in the wake of a national genetic database being approved for Portugal, with the INLM being put in charge of it. The Portuguese model has, moreover, been regarded as a study model of reference in light of the results it has been able to achieve and the value and investigative independence it provides.

National/international cooperation

As stipulated in Portuguese law, the INML operates in conjunction with higher education establishments, particularly with medical schools, especially research oriented ones (public and private), through protocols in the areas of teaching, training and scientific research. The INML can assign to or acquire from other public or private bodies, in Portugal or abroad, services relating to any forensic tests and investigations it is asked for, and also relating to holding courses and other training actions. This has indeed happened and the INML has scientific, educational and investigative cooperation protocols with a great many institutions and organizations, in Portugal and abroad. To avoid such things as extra costs in certain investigative spheres either where the INML does not have the necessary resources (scientific and human), or because the annual number of investigative tests and exams does not justify investing in buying specific equipment or personnel (for example, for forensic entomology or palynology), some investigations are undertaken in institutions (usually university departments) with which the INML has signed protocols.

Ever since its inception, the INML has also been very active abroad on various levels. It has been involved in teaching and research, taking part in the teaching of various Master’s and other postgraduate specialization courses established in Europe, South America and Africa, and has cooperated in international exchange programmes, such as the European Erasmus and Socrates programmes. It has also collaborated regularly with a number of foreign universities, mostly European and South American (Santiago de Compostela, Granada, Saragoça, Madrid,
Nápoles, Roma, Catanzaro, Buenos Aires, Bahía, São Paulo, Recife, La Paz, Montevideo, etc.). This collaboration has related to joint research projects (in Europe it takes part presently in the Daphne and DRUID programmes), and to training schemes. In terms of training, it is important to note that the INML has been responsible for two forensic science courses run in Kosovo, at the request of the UNMIK, and it is currently preparing a training course for professionals from Iraq, under the EUJUSTLEX programme, and has trained professionals form many countries like Cape Verde, Angola, Brazil, Bolivia, Sri Lanka, etc. It has also played an active part in international missions on the African, American, Asiatic and European continents, both as an institution and through the individual participation of some of its members, particularly in forensic medical operations in the wake of disasters, like the Tsunami, or genocide and war, as in Bosnia and Kosovo. It has worked on missions for the UN's High Commissioner for Human Rights, and the Committee Against Torture, the Organization of American States, the international Red Cross, etc. and cooperated in legal investigations following request from courts in other countries.

Addresses of forensic services in Portugal

As mentioned above, the National Institute of Legal Medicine is based in Coimbra. The address of its headquarters is as follows:

**Instituto Nacional de Medicina Legal**  
Largo da Sé Nova  
3000-213 Coimbra, Portugal  
Fax: +351.239836470  
Phone: +351. 239854276  
E-mail: correio@inml.mj.pt

As for its three branches in the north, centre and south, their addresses are:

**Delegação do Norte do Instituto Nacional de Medicina Legal**  
Rua Jardim Carrilho Videira  
4050-167 Porto, Portugal  
Fax: +351 223 325 931  
Phone: +351 222 073 850  
E-mail: correio@dpinml.mj.pt

**Delegacão do Centro do Instituto Nacional de Medicina Legal**  
Largo da Sé Nova  
3000-213 Coimbra, Portugal  
Fax: +351 239 820549  
Phone: +351 239 854 230  
E-mail: correio@dcinml.mj.pt
The addresses and contacts of the forensic medical offices can be obtained from the INML website: www.inml.mj.pt

Closing note

Forensic medicine and forensic sciences in Portugal have been forging ahead in recent years, and since the beginning of this century, after the creation of the INML, their influence, quality and credibility have been growing strongly, so that they are enjoying much more relevance in terms of teaching and research. The new Portuguese organic model has undoubtedly been crucial to this frankly positive evolution, and gives good reason to foresee an even better future for this area.