Perspetivas/ Perspectives

# APRI – Portuguese Society of Interventional Radiology

APRI – Associação Portuguesa de Radiologia de Intervenção

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# Introduction

Interventional Radiology is a subspecialty within Radiology, dedicated to the diagnosis and minimally invasive treatment of various pathologies of different organs and systems, guided by imaging techniques as an alternative or complement to surgery, with its genesis in the 1960s.<sup>1,2</sup> APRI – Portuguese Association of Interventional Radiology was created in 2019, being a non-profit scientific and educational association, aiming for the best treatment of patients, through scientific support, teaching and research within the scope of Interventional Radiology.<sup>3</sup> In this article we intend to introduce the concept of interventional radiology at the national level, presenting APRI to the national scientific community.

# Interventional Radiology

Interventional Radiology reflects the natural evolution in medicine of angiography schools in the first half of the 19th century.<sup>1,2</sup> Angiography schools carried out minimally

### Abstract

Interventional Radiology is a medical specialty devoted to the diagnosis and treatment of multiple diseases, spanning over different human organs and systems, using minimally invasive, image-guided techniques. APRI – Portuguese Society of Interventional Radiology was established in 2019 as a non-profit scientific and educational association, seeking better patient care through science, education, and investigation in Interventional Radiology within Portugal. APRI represents the common grounds where all Portuguese health-care professionals that work in Interventional Radiology can communicate and share experiences.

# Keywords

Interventional radiology; Education; Teaching; Training; Certification.

#### Resumo

A Radiologia de Intervenção é uma área médica dedicada ao diagnóstico e tratamento minimamente invasivo de diversas patologias, de diferentes órgãos e sistemas, guiado por meios de imagem. A APRI – Associação Portuguesa de Radiologia de Intervenção foi criada em 2019, sendo uma associação científica e educacional, sem fins lucrativos, visando o melhor tratamento dos doentes através de suporte científico, de ensino e de investigação no âmbito da Radiologia de Intervenção em Portugal. A APRI representa a voz de todos os profissionais de saúde da Radiologia de Intervenção em Portugal, ao estabelecer pontes de contacto entre todos os envolvidos.

### Palavras-chave

Radiologia de intervenção; Educação; Ensino; Formação; Certificação.

invasive studies using catheters, in conventional radiology equipments, to evaluate arterial and venous diseases. Initially, angiography was developed as a diagnostic technique. However, in the 1960s, Dr. Charles Dotter introduced the concept of treating arterial diseases through catheters used for angiographic diagnosis. Interventional Radiology was born! At that time, there were no other forms of medical imaging assessment of the arterial or venous vascular system, as Doppler ultrasound, CT angiography and/or MR angiography were developed much later. Therefore, all people with suspected arterial or venous disease would have to undergo angiographic studies using catheters in order to reach a diagnosis. Naturally, in the early years, angiography schools were only diagnostic in nature. However, with the introduction of the therapeutic potential during angiography in the 1960s, the following years led to an explosion of new treatments resorting to medical imaging, through Interventional Radiology. With the development of noninvasive medical imaging techniques to evaluate vascular pathology (Doppler ultrasound, CT angiography and/or MR angiography), purely diagnostic vascular studies were being abandoned and replaced by therapeutic procedures. Thus, in the last 50 years, Interventional Radiology has been characterized by the evolution of a medical area with diagnostic purposes, to another completely different medical area-with therapeutic purposes. Furthermore, the therapeutic potential of Interventional Radiology has been scattered to many other areas outside of vascular pathology, namely oncology, using vascular and non-vascular techniques. This evolution had a strong impact on the medical community, as Radiology is a medical specialty tending towards diagnosis, while Interventional Radiology is a medical area focused on therapy. This conceptual separation between Diagnostic Radiology and Interventional Radiology has created multiple challenges in the relationship between diagnostic radiologists and interventional radiologists. Additionally, the therapeutic potential of Interventional Radiology is quite high, to the point that other medical specialties (in addition to Radiology) have developed skills in these areas. Thus, there is a double challenge of valuing the therapeutic potential in Interventional Radiology within the specialty of Radiology, as well as in the relationship with other medical specialties, health professionals and the community in general. In order to define Interventional Radiology, and guarantee training, certification, education and scientific research, several scientific societies were created at an international level. In Portugal, there was only one Interventional Radiology nucleus within the Portuguese Society of Radiology and Nuclear Medicine (SPRMN). However, it was considered necessary, similarly to what was happening in the rest of the world, to create a society that exclusively represented the Interventional Radiology community in Portugal - thus, APRI was born in 2019.1,2,3

# APRI – Portuguese Society of Interventional Radiology

APRI is an association that aims to represent the entire national community working in the area of Interventional Radiology, including and embracing all health professionals. As a non-profit scientific and educational association, it implements its activity through teaching, training and research within the scope of Interventional Radiology. The first board of directors was responsible for founding and implementing APRI, establishing internal regulations and statutes.<sup>3</sup> In 2019, it established a partnership with the European Society of Interventional Radiology (CIRSE – Cardiovascular and Interventional Radiological Society of Europe), so that all APRI members would automatically be members of CIRSE, benefiting from all associated privileges: free access to numerous digital learning and educational platforms, training grants, discounts on registration at conferences, free access to the society's scientific journal – CVIR – Cardiovascular and Interventional Radiology, among other. Since then, APRI has been present at all CIRSE's annual congresses, with an increasing number of Portuguese representatives attending, breaking records, year after year. The last CIRSE congress took place in Lisbon, in September 2024, having broken records at all levels, with an unprecedented number of Portuguese participants; more than 100 (Fig. 1).

In 2021, APRI held the first national congress of Interventional Radiology in Aveiro. The current board of directors took office in 2023, with an ambitious program.<sup>4</sup> It worked together with the Radiology College of the Portuguese Medical Association, in order to ensure the implementation of the subspecialty in Interventional Radiology. December 12, 2023 marks a new era in Interventional Radiology in Portugal - it is when the Regulation of the Subspecialty in Interventional Radiology<sup>2</sup> is approved by the Assembly of Representatives of the Portuguese Medical Association. It is a document and a process that involved many people, over several years, but which is now taking its first steps and will have a huge impact on the consolidation of Interventional Radiology practice in Portugal. During 2024 and 2025, the interventional radiologists currently working in Portugal will be certified. From 2025 onwards, a specific training and certification program will be created for all future interventional radiologists. APRI held and sponsored several scientific congresses at national level, establishing bridges among all interventional radiologists, doctors from other areas, radiology technicians, nurses and partners in the field of medical devices. These partnerships were the basis for the success of several initiatives such as the forum at Curry Cabral Hospital in May 2023, in Viana do Castelo in March 2024, where an entire day was dedicated to basic training in Interventional Radiology and, more recently, in Braga in November 2024. We also highlight the second APRI national congress, held in October 2023 in Monte Real. For 2025 we have planned the APRI forum in Portimão, which will



Figure 1: APRI's board of directors and members during the European Interventional Radiology Congress (CIRSE) that took place in Lisbon, in September 2024.

have another full day dedicated to training on March 13th; and another day dedicated to osteo-articular intervention on March 14th. On May 9th we will organize another forum, at the Local Health Unit Entre Douro e Vouga, in Santa Maria da Feira, dedicated to cholangiocarcinoma. The third APRI national congress will take place in Peniche, on the 7th and 8th of November. Save the dates now! These activities aim to strengthen ties among the health professionals involved in Interventional Radiology at national level and encourage its implementation throughout the country. Training and education are priorities for APRI, which is why every year, at the first event of the year organized by APRI, we held a training forum, with a full day of basic training in interventional radiology, aimed mainly at radiology residents, and also at radiology technicians and nurses. In line with education, our priority is certification in Interventional Radiology, both individually and to IR departments. We will continue to coordinate alongside the commission establishing the Subspecialty in Interventional Radiology of the Portuguese Medical Association, the certification of all Portuguese interventional radiologists. We will encourage Portuguese interventional radiologists to take the European certification exam in interventional radiology (EBIR - European Board of Interventional Radiology). We created several working groups between APRI board of directors and different professional groups, including interventional radiologists, radiology residents, radiology technicians and nurses who work in the area. Bridges were created with medical schools in Portugal, to introduce Interventional Radiology to pre-graduate education. We promote partnerships with the College of Radiology of the Portuguese Medical Association, as well as with SPRMN, ATARP (Portuguese Association of Radiology, Radiotherapy and Nuclear Medicine Technicians), APRANEM (Portuguese Association of Radiology, Neuroradiology and Nuclear Medicine) and National Commission of Radiology Residents (CNIR). Following these partnerships, we organized a precongress course focused on Interventional Radiology in Oncology and Emergency in coordination with SPRMN, on the occasion of the National Radiology Congress in 2024.

### Ethical Disclosures / Divulgações Éticas

*Conflicts of interest:* The authors have no conflicts of interest to declare. *Conflitos de interesse:* Os autores declaram não possuir conflitos de interesse. *Financing Support:* This work has not received any contribution, grant or scholarship.

seu centro de trabalho acerca da publicação dos dados de doentes. Protection of human and animal subjects: The authors declare that the procedures

followed were in accordance with the regulations of the relevant clinical research ethics committee and with those of the Code of Ethics of the World Medical Association (Declaration of Helsinki).

*Protecção de pessoas e animais*: Os autores declaram que os procedimentos seguidos estavam de acordo com os regulamentos estabelecidos pelos responsáveis da Comissão de Investigação Clínica e Ética e de acordo com a Declaração de Helsínquia da Associação Médica Mundial.

We reinforced the presence of APRI as a Group member of CIRSE, extended the collaboration with the Spanish Society of Interventional Radiology (SERVEI), with the Brazilian Society of Interventional Radiology (SOBRICE) and we created an institutional relationship and work with other Portuguese scientific associations and societies. During CIRSE 2024 in Lisbon we organized a joint scientific session between APRI and SOBRICE. We created bridges with the medical device industry in the area of Interventional Radiology. We collaborated with the review of the coding and reimbursement of Interventional Radiology procedures with various stakeholders, such as the Portuguese Medical Association, National Health Care System (SNS), subsystems and insurance companies. We update APRI's website and social networks on a regular basis, in order to continuously provide timely and pertinent information.<sup>5</sup> We made every effort to increase the number of members and keep the list of APRI members updated, continuing to manage communication with them.

### **Future Perspectives**

Alongside the numerous initiatives described above, APRI will encourage not only training, education and individual certification in Interventional Radiology but will also encourage hospital accreditation through the European certification of Portuguese Interventional Radiology units and the creation of national registries of Interventional Radiology procedures. APRI established bridges within the entire Portuguese community in the field of Interventional Radiology, including doctors, radiology technicians, nurses, the medical device industry and other healthcare professionals. These bridges will take Portuguese Interventional Radiology to a new level, establishing the foundations for subsequent relationships with health management and regulatory entities. We will do everything we can to ensure that APRI is the voice of all healthcare professionals in Interventional Radiology from Portugal! Stay up to date and learn more about this wonderful world of Interventional Radiology.5

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