

• 特别通讯 Special communications •

编者按:

介入放射学源于放射诊断学,历经 40 多年的发展历史,已成为当今最活跃和最具发展潜力的临床治疗学科或技术。同时,随着世界各国的医疗体系和水平的不一,放射学及相关临床专科的工作范畴的差异,介入放射学在不同的国家和地区也经历了不同的命运,在一些国家和地区,放射科医师仍然是从事和掌握介入技术的主要专科医师,介入放射学仍然是放射学的重要组成部分,而有些国家和地区则已被临床各科所肢解,介入放射学已散落在临床各科室,有些则趋于独立成科……,鉴于此,在具有重要国际影响的两大介入放射学会——美国介入放射学会(SIR)和欧洲心血管与介入放射学会(CIRSE)的发起和牵头下,全球 42 个国家和地区的介入专业学会走到了一起,制定了“全球介入放射学专业学科范畴的联合申明”,同时在 JVIR 和 CVIR 发表,并授权参与制定该申报的介入学会用本国语言予以发表。中华放射学会介入学(CSIR)组织积极参与了该申报的起草与定稿,相信,该申报将有助于介入放射学在我国的健康发展。

全球介入放射学专业学科范畴的联合声明

所列的各国和地区介入放射学组织机构于 2010 年 6 月 7 日共同签署声明,因将有更多的学会签署本声明,以后会以网络媒体重新公布。

本声明将同时刊登于 J Vas Interv Radiol, 2010; 21: 1147-1149 和 CardioVascular and Interventional Radiology, 2010 年第 33 卷第 4 期。除少许细微的格式和拼写差别外,这两本期刊所登文章内容完全相同。若引用该文章则可以标注这两本期刊中的任何一本。若转载该文则需三位版权所有之一授权。如需在期刊、网站或者其他形式出版物刊登本文,请联系美国介入放射学会(SIR)网站电子邮箱:dkatsarelis@sirweb.org。

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DOI: 10.1016/j.jvir.2010.05.006

文章编号: 1008-794X(2010)-08-0593-05

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1 目的

通过全球联合声明阐明介入放射学专业基本要素与范畴。

2 背景

介入放射学源于放射诊断学中的侵袭性诊断亚专业。如今,介入放射学已成为范围广泛的影像引导下微创治疗技术和侵袭性影像诊断构成的治疗和诊断专业。适合影像引导下治疗和诊断的疾病和器官非常广泛并且不断增加,包括(但不限于):血管、胃肠道、肝胆、泌尿生殖、呼吸、骨骼肌肉和中枢神经(部分国家)等系统的疾病。作为介入放射学诊疗的一部分,介入放射医师与其他专科医师合作或独立为病人提供影像引导下介入治疗相关评估和处理。介入诊疗技术已成为医疗保健不可缺少的一个组成部分。

3 介入放射学的定义

根据当地的实际情况,介入放射学在每个国家和地区有所不同。在一些国家和地区,介入放射学已被正式承认为放射诊断学中独特的亚专业,而在另一些国家和地区,介入放射学被作为一门独立的放射学专科。无论是亚专业还是专科,介入放射学具有以下共性:①具有影像诊断和辐射安全的专业知识和技能。②具备适用于多种疾病和器官影像引导下微创操作技术的专业知识和技能。③具有对介入放射诊疗范围内适合影像引导的介入治疗病人的评估和处理的专业知识和技能。④具备对介入新技术、器材以及术式的不断发明和创新的能力。

基于上述特点,介入放射学是一门独特的,有别于外科学、放射诊断学以及其他所有医学专科或亚专科的学科。

4 介入放射学的要素

以下元素构成介入放射学定义:

4.1 临床范畴

a.对适合于影像引导下治疗的疾病和临床状况的病人进行评估和处理。b.除侵袭性心脏影像以外的侵袭性影像诊断。c.影像引导下的微创治疗的相关技术操作,包括血管、胃肠、肝胆、泌尿生殖、呼吸、肌肉骨骼和神经系统(部分国家)疾病。d.部分相关地区执业也包括影像诊断。

4.2 培训

4.2.1 专门的、标准化和规范的介入放射学培训课程包括:Ⅰ.正规的影像诊断培训和考试。Ⅱ.正规的放射物理学和安全培训和考试。Ⅲ.正规的影像引导下微创操作技术培训和考试。Ⅳ.介入诊疗的门诊和住院病人的临床处理和随访的正规训练和考试。Ⅴ.科研的培训。

4.2.2 医院或医学院,或用于住院医师和专科医师培训的机制支持介入医师的培训。

4.3 资格认证

4.3.1 完成标准化的介入放射学和影像诊断的培训计划。①通过普遍接受和承认的医疗认证机构的考试。②达到国家和地方的医疗认证机构要求的证书维护要求。③由介入放射学专科或亚专科认证机构(或同等机构)正式确认通过。

4.4 临床实践

4.4.1 患者诊疗 ①有为门诊病人提供就诊,制定治疗计划和术后随访所必须的医疗场所、设施和人员。②为介入治疗病人设定的入院程序。③有介入治疗住院病人查房程序。④有病人上述医疗过程的永久性医疗记录文件。

4.4.2 有足够的专用于影像引导下介入治疗的影像设备,各种配套设施和器械。①符合对病人和工作人员的辐射安全规定。②符合对病人监测的地方标准。

4.4.3 有专门的介入放射登记人员、技术员、护理人员、助理医师和辐射安全人员。

4.4.4 独立的或与放射诊断结合的介入放射学诊疗机构。

4.5 质量

①长期致力于不断的介入质量改进。②有组织的终身继续教育计划。③选择最佳的介入治疗方案。④鼓励采用专业学会制定的介入规范化治疗方案。⑤正规的采集、记录和分析并发症和结果。

4.6 研究

①根据国际公认的伦理和质量标准进行基础,

实验室和临床研究。②对影像引导下治疗的疾病及相关临床情况进行研究。③研发新的影像引导下介入技术和介入器械。④介入疗效研究,包括与非介入治疗的比较研究。⑤鼓励随机、前瞻性临床试验。⑥介入学会组织应对研究培训进行投入。

4.7 职业化

①在所有临床实践中,坚持患者益优先的原则。②与其他专科合作,优化患者的治疗效果。③向病人、提供病人的医生、医院管理者、公众和期刊公开自己与相关厂商的利益冲突(尤其是经济方面的)。④促进各个层面正式承认介入放射学为放射学的一个独立的专科或亚专科。⑤促进介入放射学专业或亚专业的建设。⑥只要合适,推动介入诊疗技术作为病人的一线治疗选择。

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Global Statement Defining Interventional Radiology

J Vasc Interv Radiol 2010; 21:1147-1149

A consensus statement developed by the Society of Interventional Radiology (SIR, USA), Cardiovascular and Interventional Radiological Society of Europe (CIRSE, Europe), Austrian Society of Interventional Radiology (.GIR, Austria), Brazilian Society of Interventional Radiology and Endovascular Surgery (SoBRICE, Brazil), British Society of Interventional Radiology (BSIR, United Kingdom), Bulgarian Society of Interventional

Radiology (Bulgaria), Canadian Interventional Radiology Association (CIRA, Canada), CardioVascular and Interventional Radiology Section within the Singapore Radiological Society (CVIR section of the SRS, Singapore), Cardiovascular and Interventional Society of Turkey (TGRD, Turkey), Chinese Society of Interventional Radiology (CSIR, China), Croatian Society of Radiology (CSR, Croatia), Czech Society of Interventional Radiology

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*The organizations listed represent the national interventional radiology organizations who have signed onto this statement as of June 7, 2010. As more societies sign onto the statement, future iterations will appear as Web media.

This article is being published concurrently in CardioVascular and Interventional Radiology, Volume 33(4), 2010. The articles are identical except for minor stylistic and spelling differences in keeping with each journal's style. Either citation can be used when citing this article. Permission to reproduce this article can be granted by one of the three copyright holders. To request permission to print this article in a journal, Web site, or other publication, please contact the SIR at dkatsarelis@sirweb.org.

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DOI: 10.1016/j.jvir.2010.05.006

Invasive Therapy (DeGIR, Germany), Hellenic Society of Interventional Radiology (GSIR, Greece), Hong Kong Society of Interventional Radiology (HKSIR, China), Hungarian Society of Cardiovascular and Interventional Radiology (HSIR, Hungary), IberoAmerican Society of Interventionism (SIDI, Latin America), Indian Society of Vascular and Interventional Radiology (ISVIR, India), Interventional Radiology Section, Polish Medical Society of Radiology (PLTR, Poland), Interventional Radiology Society of Australasia (IRSA, Australia and New Zealand), Irish Society of Interventional Radiology (ISIR, Ireland), Israeli Society of Interventional Radiology (ILSIR, Israel), Japanese Society of Interventional Radiology (JSIR, Japan), Korean Society of Interventional Radiology (KSIR, Korea), Pan Arab Interventional Radiology Society (PAIRS, Lebanon), Philippine Society of Vascular and Interventional Radiology (PSVIR, Philippines), Portuguese Section of Interventional Radiology (NURIP) of the Portuguese Society of Radiology and Nuclear Medicine (SPRMN, Portugal), Section of Cardiovascular and Interventional Radiology of the Royal Belgian Radiological Society (RBRS, Belgium), Seldinger Society of Vascular and Interventional Radiology (SSVIR, Sweden), Sezione di Studio della SIRM di Radiologia Vascolare ed Interventistica (SIRM, Italy), Sociedad Argentina de Radiologia (SAR, Argentina), Society of Interventional Onco-Radiology (RSIOR, Russia), Spanish Society of Vascular and Interventional Radiology (SERVEI, Spain), Swiss Society of Cardiovascular and Interventional Radiology (SSCVIR, Switzerland), Taiwanese Radiological Society (Taiwan), Thai Society of Vascular and Interventional Radiology (TSVIR, Thailand), and the Working Group of Cardiovascular and

Interventional Radiology of the Slovak Radiological Society (PSKVIR, Slovak Republic).*

A. PURPOSE

A global statement setting forth the basic elements of interventional radiology (IR).

B. BACKGROUND

IR originated within diagnostic radiology as an invasive diagnostic subspecialty. IR is now a therapeutic and diagnostic specialty that comprises a wide range of minimally invasive image-guided therapeutic procedures as well as invasive diagnostic imaging. The range of diseases and organs amenable to image-guided therapeutic and diagnostic procedures are extensive and constantly evolving, and include, but are not limited to, diseases and elements of the vascular, gastrointestinal, hepatobiliary, genitourinary, pulmonary, musculoskeletal, and, in some countries, the central nervous system. As part of IR practice, IR physicians provide patient evaluation and management relevant to image-guided interventions in collaboration with other physicians or independently. IR procedures have become an integral part of medical care.

C. DEFINITION OF INTERVENTIONAL RADIOLOGY

In each country and region, IR practice varies according to local factors. Furthermore, in some countries, IR is formally recognized as a unique subspecialty of diagnostic radiology, whereas in other countries IR is formally recognized as a distinct radiologic specialty. The following features are common to IR both as a subspecialty or specialty:

1. Expertise in diagnostic imaging and radiation safety.
2. Expertise in image-guided minimally invasive procedures and techniques as

applied to multiple diseases and organs.

3. Expertise in the evaluation and management of patients suitable for the image-guided interventions included in the scope of IR practice.

4. Continual invention and innovation of new techniques, devices, and procedures. Based on these features, IR is unique and distinct from all other surgical, radiologic, and medical subspecialties and specialties.

D. ELEMENTS OF IR

The following elements define IR:

1. Clinical Scope

- a. Evaluation and management of patients with diseases or conditions amenable to image-guided interventions.
- b. Invasive diagnostic imaging with the exception of invasive cardiac imaging.
- c. Minimally invasive image-guided and related procedures of vascular, gastrointestinal, hepatobiliary, genitourinary, pulmonary, musculoskeletal, and, in some countries, neurologic conditions amenable to these procedures.
- d. Diagnostic imaging as relevant to local practice.

2. Training

- a. Dedicated, standardized, and regulated IR training programs that include:
 - i. Formal training and testing in diagnostic imaging.
 - ii. Formal training and testing in radiation physics and safety.
 - iii. Formal training and testing in image-guided minimally invasive and related procedures and techniques.
 - iv. Formal training and testing in longitudinal outpatient and inpatient care relevant to patients undergoing IR procedures.
 - v. Training in research.
- b. Support for trainees by hospital, medical school, or other mechanisms used to support residents and fellows.

3. Certification

- a. Completion of standardized IR and imaging training programs.
- i. Examination by a generally accepted and recognized medical certifying body.
- ii. Maintenance of certification as required by national and local medical certifying bodies.
- iii. Formal acknowledgment by board-certifying organizations (or their equivalent) of IR as a unique specialty or subspecialty of radiology.

4. Clinical Practice

- a. Patient care
 - i. Outpatient clinical facilities and staff for patient consultations, treatment planning, and follow-up.
 - ii. Admitting privileges to an IR service.
 - iii. Inpatient rounds on admitted IR patients.
 - iv. Documentation in permanent medical records of above interactions with patients.
- b. Dedicated and adequate imaging equipment, facilities, and tools for performing image-guided interventional procedures.
- i. Adherence to radiation safety practices for patients and staff.
- ii. Adherence to local standards of patient monitoring.
- c. Dedicated IR clerical, technical, nursing, midlevel practitioners, and radiation safety staff.
- d. IR practice combined with or exclusive of diagnostic radiology.

5. Quality

- a. Lifelong dedication to continuous quality improvement.
- b. Lifelong continuing education through organized programs.
- c. Adoption of best practices when applicable.
- d. Adherence to official IR societal practice standards whenever feasible.
- e. Formal collection, recording, and analysis of complications and outcomes.

6. Research

- a. Basic, laboratory, and clinical research performed according to the internationally accepted principles of ethical research practices and standards of quality.
- b. Investigations into diseases and conditions treated with image-guided techniques.
- c. Development of new image guided interventional techniques and devices.
- d. Outcomes investigations including comparative effectiveness to non-IR treatments.
- e. Randomized, prospective clinical trials whenever feasible.
- f. Investment by IR organizations in research training.

7. Professionalism

- a. The best interests of the patient first in all clinical interactions.
- b. Collaboration with other specialists to optimize patient outcomes.
- c. Open disclosure of conflicts of interest

(especially financial) to patients, referring physicians, hospital administrators, audiences, and journal referees.

d. Formal recognition of IR at all levels as a distinct subspecialty or specialty of radiology.

e. Promotion of the specialty or subspecialty of IR.

f. Promotion of IR procedures as first treatment options for patients whenever appropriate.

APPENDIX

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