

Tests, treatments and procedures at risk of inappropriateness in Italy that Physicians and Patients should talk about.

Five Recommendations from the Italian Society of Medical and Interventional Radiology (SIRM) – 1st List

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| 1 | <p>Don't perform magnetic resonance imaging (MRI) of the spine within the first six weeks in patients with low back pain in the absence of warning signs or symptoms (red flags).</p> <p>Usually MRI is prescribed at the first complaint of back pain and sciatica, without performing a first-line conservative treatment with both pharmacologic and nonpharmacological (e.g., exercises, remaining active) therapy. In the absence of serious neurological or systemic symptoms, lumbosacral MRI for both acute and chronic lower back pain and sciatica is not routinely recommended, but should be considered only if there are persistent or progressive symptoms during or following 6 weeks of conservative treatment.</p> <p>If MRI shows no pathological findings it should not be repeated within 24 months. In the absence of red flags (such as cord compression or spinal cord injury) in patient history or physical examination, an MRI or other imaging techniques in the first six weeks, usually don't modify the therapeutic approach but could lead to incidental findings, to perform other unnecessary examinations or surgery, or to ionizing radiation exposition; all representing a high cost for society.</p> |
| 2 | <p>Don't perform routine magnetic resonance imaging (MRI) of the knee in the event of acute pain from trauma or chronic pain.</p> <p>MRI of the knee is often prescribed before an orthopedic clinical examination or specialist request, to patients of any age; even when this examination is not useful to a therapeutic decision.</p> <p>Patient history, accurate physical examination and knee radiograph are usually sufficient for diagnosing most of knee injuries that will benefit from a conservative medical and physical treatment. In the absence of clinical signs of alarm, performing a MRI of the knee in the first 4-6 weeks in acute pain from trauma or early in chronic pain, does not modify the therapeutic approach, but could lead to incidental findings, to further tests and even to unnecessary surgery which represents a high cost for the community. MRI should be considered only when it will lead to a more accurate diagnosis for the choice of a more adequate treatment.</p> |
| 3 | <p>Don't perform magnetic resonance imaging (MRI) for non-traumatic headache in the absence of warning clinical signs.</p> <p>Too many MRIs are performed at the first sign of non-traumatic headache; In addition, the clinical suspicion is rarely mentioned in the request, which would suggest how to perform an appropriate examination, as there are different ways to perform an MRI examination depending on the question to resolve.</p> <p>Performing an MRI (with and without contrast agents) in patients with a headache, without specific risk factors for structural diseases, does not change the management nor improve clinical outcomes. Patients with a significant probability of structural sickness that require immediate attention are identified by clinical history and / or examination. Eventual incidental findings as a result of MRI examination may lead to further additional testing and expensive treatments that don't improve the welfare of the patient.</p> |
| 4 | <p>Don't perform preoperative chest x-rays in the absence of clinical signs or symptoms which indicate diseases that could affect the outcome of the surgery.</p> <p>Clinical evidence does not support the routine performance of preoperative chest radiography, without a specific reason suggested by medical examination or the history of the patient. In the absence of cardiopulmonary signs or symptoms routine preoperative chest radiographs uncommonly add significant clinical information that could influence patient care and should be weighed against adverse effects, including radiation exposure and potential morbidity from the investigation of incidental findings.</p> <p>The decision to perform a chest radiograph should principally derive from the needing to investigate a clinical suspicion for acute or stable chronic cardiopulmonary disease in advanced patient age (especially >70 years).</p> |
| 5 | <p>Don't perform routine radiology of the skull in minor head injury.</p> <p>Minor traumatic brain injury (TBI) is defined as a head injury with or without a history of loss of consciousness, amnesia or confusion, with a Glasgow Coma Score (GCS) of 14 or 15; excluding patients with focal neurological deficit, suspected skull fracture or with clinical signs of basilar skull fracture.</p> <p>X-ray of the skull can identify fractures associated with an increased intracranial bleeding risk, but does not identify the intracranial bleeding. Therefore it is not routinely indicated in minor TBI, while Computed Tomography (CT) is considered the reference examination to detect lesions of immediate clinical importance. Performing inappropriate skull radiography in head trauma can delay the execution of CT or other urgent tests and exposes the patient to ionizing radiations unnecessarily. Despite the demonstrated not usefulness of those examinations, many skull radiographs continue to be requested.</p> <p>A GCS score of 15 (patient fully conscious) absence of risk factors and no symptoms except pain at the point of impact, contraindicate even the immediate execution of CT.</p> |

Attention. Please note that these items are provided only for information and are not intended as a substitute for consultation with a clinician. Patients with any specific questions about the items on this list or their individual situation should consult their clinician.

How this list was created

In occasion of the Executive Board meeting on 8 July 2013 the **Italian Society of Medical and Interventional Radiology – SIRM** – has officially published 5 high-risk practices of inappropriateness identified by Slow Medicine under the project “Doing more does not mean doing better.” A review of the literature was carried out based on common clinical practices that do not, in most cases, determine a clinical decision. The practices selected were chosen based on lack of efficacy, risk of damage from exposure to ionizing radiation, risk of over-diagnosis and over-treatment, and high diffusion in Italy; also inherently characterized by high costs. The identification of the procedures took into account the ACR appropriateness criteria (<http://www.acr.org/Quality-Safety/Appropriateness-Criteria>) and the agreement between the Italian Minister of Health, the Italian Regions and Autonomous Provinces of Trento and Bolzano on the document entitled “Guidelines for diagnostic imaging” based on art. 4 of Legislative Decree of the 28th of August 1997, n.281. Sources have been revised in December 2022.

Although the D.Lgs. 101/ 2020 del 31 luglio 2020 states that the justification of these practices is a responsibility of the MD Radiologist together with the prescriber, the case law and the daily practice make it difficult to consistently reject these requests in the absence of an appropriate awareness of prescribing doctors and general population.

Sources

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Slow Medicine, an Italian movement of health professionals, patients and citizens promoting a Measured, Respectful and Equitable Medicine, launched the campaign “**Doing more does not mean doing better- Choosing Wisely Italy**” in Italy at the end of 2012, similar to Choosing Wisely in the USA. The campaign aims to help physicians, other health professionals, patients and citizens engage in conversations about tests, treatments and procedures at risk of inappropriateness in Italy, for informed and shared choices. The campaign is part of the Choosing Wisely International movement. Partners of the campaign are the National Federation of Medical Doctors' and Dentists' Orders (FNOMCeO), that of Registered Nurses' Orders (FNOPI), the Academy of Nursing Sciences (ASI), National Union of Radiologists (SNR), Tuscany regional health agency, PartecipaSalute, Altroconsumo, the Federation for Social Services and Healthcare of Aut. Prov. of Bolzano, Zedig. www.choosingwiselyitaly.org; www.slowmedicine.it

The **Italian Society of Medical and Interventional Radiology – SIRM** – was founded in 1913 and counts over 11,000 members. Its purpose is scientific research, cultural updating and training in the study of biomedical imaging, in its physical, biological, diagnostic, radiation protection and IT aspects. The President remains in office for two years and the twelve councilors for four years. The organization is present throughout Italy and is divided into 18 Regional Groups and 20 Study Sections (e.g. Breast Care, Thoracic Radiology, Musculoskeletal Radiology, Urgency, Ethics, MRI, etc.). The official media branch is the “La Radiologia Medica” the professional scientific journal published in English with IF 6.313. Other radiological publications include: “Journal of Radiological Review” and “Il Radiologo”. The National Congress is held every two years and is attended by around 4,500 members. The official site: www.sirm.org can provide further details.