

Medical Safety Information

Pharmaceuticals and Medical Devices Agency

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Precautions for Magnetic Resonance Imaging (MRI) Scans (Part 2)

POINT Key points for safe use

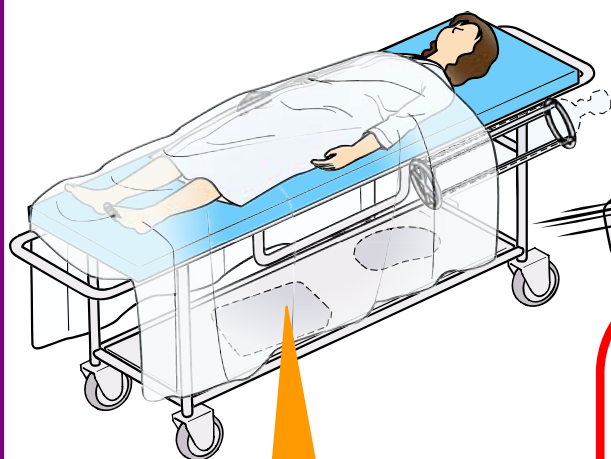
(Case 1) When a patient was transferred to the MRI room on MRI stretcher for an MRI scan, an oxygen cylinder beside the stretcher was swiftly pulled towards the gantry, where it stuck.

1 Precautions against magnetic objects

- Make sure that there are no magnetic objects before entering MRI room.



MRI room has a strong magnetic field at all times, and it is strictly prohibited to bring magnetic objects into MRI room.



Accidents involving magnetic objects (1)

Oxygen cylinder

Walking aid



Photos by Japan Industries Association of Radiological Systems

Be careful about metal trays placed in blind spots, such as under drapes.



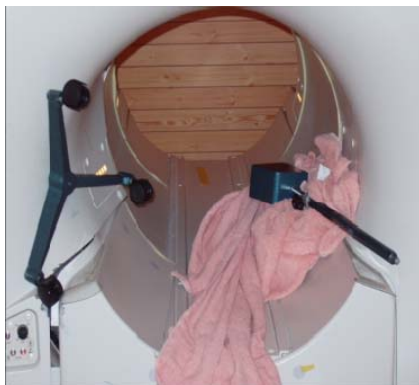
There have been reports of accidents where patients or healthcare professionals were injured by being hit by flying magnetic objects such as oxygen cylinders or stretchers.

Accidents involving magnetic objects (2)

Bed



Infusion stand



Cleaning tool



Photos by Japan Industries Association of Radiological Systems

(Case 2) Patient's fingers were caught in the gap between a top board and the gantry entrance and resulted in injury while moving the top board. The accident occurred because the patient was moved into the gantry with his/her fingers grasping the top board.

2 Precautions against fingers being trapped

- Provide patients clear instructions not to grasp the top board during an MRI scan.

Cases of fingers being trapped (1)

Fingers being trapped in the gap between the top board and patient table.

Direction of the top board moving in

Gantry

Top board

Direction of the top board moving in


Patient table

Grasping the top board!

There is a risk of fingers being trapped in the patient table if patients are grasping the top board.




Cases of fingers being trapped (2)



There is also a risk of **fingers being trapped in the gap within MRI machine** if patients are grasping the top board. Please check the locations where fingers may become trapped, and these locations may **vary depending on the kind and structure of the machine.**

Direction of the top board moving in


Top board



Fingers being trapped in the gap between the top board and gantry entrance.

Direction of the top board moving in

Careful attention should be also paid when using **computed tomography (CT) machines which have a similar structure.** Please use **fixed bands** (see PMDA Medical Safety Information No.25) for patients who have difficulty in maintaining an appropriate position.



Notices from organizations and groups that are related to this medical safety information are available at the Pharmaceuticals and Medical Devices Information website (in Japanese)

http://www.info.pmda.go.jp/anzen_gyokai/file/jira01.pdf

http://www.info.pmda.go.jp/anzen_gyokai/file/jira02.pdf

About this information

- * PMDA Medical Safety Information is issued by the Pharmaceuticals and Medical Devices Agency for the purpose of providing healthcare providers with clearer information from the perspective of promoting the safe use of pharmaceuticals and medical devices. The information presented here has been compiled, with the assistance of expert advice, from cases collected as Medical Accident Information Reports by the Japan Council for Quality Health Care, and collected as Adverse Drug Reaction and Malfunction Reports in accordance with the Pharmaceutical Affairs Law.
- * We have tried to ensure the accuracy of this information at the time of its compilation but do not guarantee its accuracy in the future.
- * This information is not intended to impose constraints on the discretion of healthcare professionals or to impose obligations and responsibility on them, but is provided as a support to promote the safe use of pharmaceuticals and medical devices by healthcare professionals.