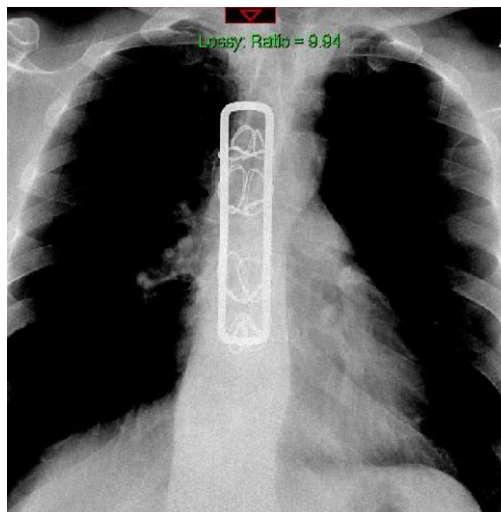


Generic Implant Safety Procedures in MRI: Should we always identify make/model before scanning?

Previous surveys have suggested that approximately 25% of patients referred for MR will have a medical implant of some type.(1) Gaining information on these implants can prove difficult, leading to delays and potential cancellations of the scan. In response to this, sites have started to take the pragmatic approach of scanning implants without identifying make and model where they assume certain categories of implants are all safe and can be scanned under *generic* or *blanket* procedures. In a recent survey we identified that 89% of MRI departments undertook this generic or blanket scanning of implants in some form (2). This approach is growing in acceptance with eminent figures in the MR safety community such as Frank Shellock producing his own generic scanning guidelines for implants such as coronary stents.



Would you scan this patient without identifying implant make and model?

Despite generic implant safety procedures (GISPs) becoming commonplace there are no recommendation on how to develop and implement GISPs. Our survey demonstrates variation in practice where some sites would simply use an external procedure (e.g., ref 3) at their own risk, whilst others would undertake a full review of the topic with approval via their local governance chain (e.g. radiology governance group and/or MR safety committee).

Given this variation, discussion began back in 2017 amongst MR Safety Experts within the UK regarding guidance which could advocate the use of GISPs in certain circumstances. The initial discussion triggered the formation of a working party with membership from BIR, RCR, IPEM, SOR and BAMRR. The working party undertook a survey of current UK practices (2) and is close to publishing guidance for sites wishing to develop GISPs (4). The suggested approach includes a detailed review of available evidence sources, a risk assessment, a clear procedure statement and where appropriate, a workflow on how radiographers should implement the GISP (5). These procedures can avoid delays to patient exams and reduce the staff burden on investigating specific implants. However, GISPs do have some risks such as an unidentified MR Unsafe implant and newly released MR Unsafe implants not captured by the procedure.

We feel however, with robust evidence gathering and approval within a local governance framework then a GISP can be safely implemented with minimal risk and overall benefit to the patient. In the future we hope to provide publicly available evidence bases and potentially full implant scanning procedures, which are endorsed by the relevant professional bodies, for sites to include into their workflow and local MRI safety governance.

This, together with other aspects of GISPs will be discussed at the IPEM MR Safety Update meeting in London in November 2023.

1 Ashmore, J. IPEM working party on Blanket Policies for scanning implants. IPEM MR Safety Update 2017

2 Survey to be published in a forthcoming issue of Rad Mag

3 Shellock, F [Guidelines](#) for the Management of Patients with Coronary Artery Stents Referred for MRI Examinations

4 Guidelines to be published this year in a peer reviewed journal (e.g. *BJR*)

5 <https://www.mriphysics.scot.nhs.uk/implant-safety-policies/>

Join the BIR today
at www.bir.org.uk

The British Institute of Radiology
Audrey House
16-20 Ely Place
London
EC1N 6SN

T : +44(0)20 3668 2220
E : admin@bir.org.uk

Patron - Her Majesty
The Queen
(1958-2022)

Registered Charity
No. 215869