SHORT PAPER SESSION J2

J2.1 Forensic and post mortem imaging - a modality for everyone

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The Association of Forensic Radiographers (now International Association of Forensic Radiographers) was established in the UK 20 years ago.
2024 also saw the release of the revised Forensic and Post-Mortem Radiography Guidance, a joint venture by UK-IAFR and the Society of Radiographers (SoR), which saw several changes including the importance of education and raising awareness of this specialist area to radiographers, students and assistant practitioners.
It is the aim of this presentation to give an over view of where we are now in the UK in terms of education, the provision of post-mortem imaging services including how it compliments more traditional postmortems, and how it is of benefit to the whole community regardless of potential religious and cultural differences.

J2.2 Embedding patient and public involvement (PPI) in the implementation of breast ultrasound elastography quality assurance (QA): A collaboration between the Institute of Cancer Research and the NHS

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Background
Ultrasound elastography is a non-invasive imaging technique that provides information about the elasticity of tissues. In breast, it has the potential to detect abnormalities and aid diagnosis, speeding up treatment and improving patient outcomes. The clinical benefits of ultrasound elastography are unquestionable. However, there is limited routine QA or performance assessment of elastography protocols in ultrasound scanners due to lack of resources, equipment, and expertise. Investment in an elastography phantom, plus proper training, and the development of a QA programme, embedding PPI, would alleviate the problem.
Purpose
- To increase awareness of breast ultrasound elastography. Women under 50 tend to have denser breast tissues and ultrasound can be more effective at detecting abnormalities.
- To understand patients' experiences of ultrasound and understand barriers towards equity in healthcare. Black and ethnic minority women are diagnosed with later-stage breast cancer at a younger age and have a higher mortality rate than white women.
- To collaborate with patients on the design of ultrasound elastography QA programme, addressing potential concerns.

Summary of content
If we are implementing a risk stratified breast screening programme in the NHS, which can include ultrasound elastography, we have a moral obligation to ensure that we are involving patients and the public in the design of it, building a culture of inclusion across all aspects of the service.
Patients think ultrasound QA is crucial but recognise the constraints of limited time and resources within the NHS.
Patients do not mind if QA is performed by NHS or subcontracting.

References
1. Cancer Research UK, Black women more likely to be diagnosed with late-stage cancer, accessed January 2025
2. https://nationalscreening.blog.gov.uk, UK National Screening Committee – News and updates from the UK National Screening Committee, accessed January 2025
Acknowledgments
The author acknowledges funding support from the IPEM Innovation Grant

J2.3 A clinical audit of patient identification check, and adequacy of imaging request forms in an outpatient computed tomography unit

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Background
The Ionising Radiation (Medical Exposure) Regulations 2017 (IR(ME)R) ensure patient safety in the UK through optimisation of ionising radiation exposures. In 2023/24, the Care Quality Commission (CQC) reported 447 accidental exposures from diagnostic imaging departments, 65% of which occurred in Computed Tomography (CT) imaging. Reacting to this, the Society of Radiographers (SOR) has called for enhanced training, particularly in CT departments. This audit evaluates the roles of referrers, practitioners, and operating radiographers in ensuring patient safety in CT imaging.

Methods
This study employed a retrospective, cross-sectional design to assess compliance with patient identification and request form completion standards in an outpatient CT department. Using convenience sampling, a total of 109 CT scans were observed for patient ID check adherence. 109 CT imaging request forms were analysed for presence of background clinical information and differential diagnoses. Data were analysed using binary check box method.
Results
Findings revealed an 82.6% compliance rate for patient ID checks, falling short of the 100% target, with significant correlation between compliance and radiographer experience. Issues with request form completion were also identified: 80.7% of forms were compliant, but 19.3% lacked a differential diagnosis. Notably, external referrers were more likely to omit this crucial detail.

Conclusion
Results suggest a need for improved staff training, particularly for newly qualified radiographers and external referrers, as well as adoption of standardized protocols and potential technological solutions to enhance compliance and ensure patient safety.

1. Care Quality Commission [CQC] (2024) IR(ME)R annual report 2023/24: CQC's enforcement of the Ionising Radiation (Medical Exposure) Regulations 2017. Available at: https://www.cqc.org.uk/publications/irmer-annual-report/2023-2024 (Accessed: 7 January 2025).
2. Rawoo, R. (2018) 'Clinical audit of the completion of CT scan request forms', British Journal of Radiology, 91(1089), article number 20180272. Available at: https://doi.org/10.1259/bjr.20180272
3. Society of Radiographers (2024) 'SoR update on Care Quality Commission's Annual IR(ME)R report', 07 October 2024 [Press release]. Available at: https://www.sor.org/news/radiation-protection/care-quality-commission%E2%80%99s-annual-ir(me)r-report (Accessed: 7 January 2025).

J2.4 Preventing deaths and harm from misplaced nasogastric tubes: Long term results of radiographer-led pathway

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Purpose
To evaluate whether radiographer identification and action for misplaced nasogastric (NG) feeding tubes prevent patient harm and deaths in a multisite tertiary centre.
Materials and methods
Healthcare systems cause death and harm from feeding into misplaced nasogastric tubes. Service transformation was triggered by 4 adverse events in a 762-day period in our Trust covering 2,500 beds related to NG xray (NGXR) interpretation and miscommunication.
Radiographers were trained to provide immediate NGXR interpretation and take action to remove or arrange repositioning for misplaced NG. Continuous surveillance of NG adverse events and radiographer NGXR interpretation accuracy were evaluated for 4,953 days after implementation in a service performing 10,000 NG placements per annum.
Results
Trained radiographer NGXR evaluation and action on misplaced tubes prevented any episodes of harm after pathway implementation (0 events in 4953 days vs 4 events in 762 days). Pathway change reduced NGXR requesting (preintervention 75% vs 9.3% post) with increased first line pH testing of gastric aspirate (pre intervention pH 12% vs 84%). Accuracy of NGXR position compared with radiologist review was 99%.
Conclusion
Radiographer training and empowerment to immediately evaluate and act on NGXR findings produced sustained prevention of patient harm, reduced NGXR requesting and improved pathway compliance. This should serve as a basis for a national patient safety programme. We propose an achievable NGXR accuracy standard over 95% in a large trained radiographer workforce.

J2.5 One Health and its relevance for diagnostic imaging

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Background
One Health is defined as "an integrated, unifying approach that aims to sustainably balance and optimize the health of people, animals and ecosystems" [1]. Despite One Health's critical role in addressing global health challenges, its relevance within medical imaging remains underexplored. This work aims to enhance awareness of One Health among imaging professionals and highlight its applications.
Purpose
This work aims to allow attendees to:

- Develop an understanding of the One Health concept
- Consider the importance of One Health in tackling global and local health issues
- Consider ways in which medical imaging can contribute to, and benefit from, a One Health approach
- Explore strategies for integrating a One Health framework into medical imaging practices, considering enablers and barriers

Summary of content

The core concepts of One Health - including the interconnectedness of human, animal and environmental health and the value of interdisciplinary contribution - will be introduced, giving examples (including zoonoses, climate, antimicrobial resistance, pollutants and more). The history of the One Health concept and key landmarks, including the quadripartite Joint Plan of Action 2022-26, will be outlined. The dichotomy of imaging as both a contributor and solution to issues will be considered. A review of recent research and developments relevant to One Health and imaging, and of current awareness in imaging, will be provided. Finally, areas where imaging professionals could contribute to One Health approaches - and the advantages of a One Health approach can bring to imaging - will be discussed.

FAO, UNEP, WHO, and WOAH (2022). One Health Joint Plan of Action (2022-2026). Working together for the health of humans, animals, plants and the environment. Rome. https://doi.org/10.4060/cc2289en

J2.6 Exploring end of life care provision during medical imaging in hospitals: Analysis of survey data from the UK radiography workforce

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Background

Patients receiving end-of-life care often undergo medical imaging examinations in hospitals to inform symptom management and care. Yet little is known about the experiences of the radiography workforce who deliver it. This study aims to describe and explore experiences of the UK radiography workforce delivering medical imaging as part of patients' end-of-life care.

Method

A cross-sectional online survey disseminated via social media and national organisations from September 2023 to January 2024. Diagnostic radiographers, assistant practitioners and radiology assistants involved in the medical imaging of patients receiving end-of-life care in UK hospitals.

Results

120 valid responses were received. Most respondents received no education/training (91.6%) on the role of medical imaging in end-of-life care, despite 87.7% expressing a need for education, particularly around adopting supportive/palliative-centric communication techniques. Although most respondents (89.2%) had heard of end-of-life care, some had difficulty understanding the role of medical imaging in end-of-life care. Insufficient information provided on imaging requests hindered the workforces' ability to determine and understand the appropriate use of medical imaging during end-of-life care. These uncertainties exacerbated negative emotions, with 80.8% of respondents indicating that they felt emotional during or after imaging patients on end-of-life care.

Conclusion

This study has evidenced the important role the radiography workforce play in generalist end-of-life care. Educational and policy needs were identified around facilitating more supportive/palliative-centric communication techniques and providing the radiography workforce with the knowledge to better understand, explain, deliver and where necessary, challenge the use of medical imaging in end-of-life care.

Spacey, A., Heaslip, V., & Szczepura, K. (2024) Exploring end of life care provision during medical imaging in hospitals: Analysis of survey data from the UK radiography workforce. Radiography. 30(5), 1308-1316.
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