

Abstract-based Programme

Results or Findings: A total of 128 valid responses were received (112 autistic adults and 16 parents/carers of autistic children). The main barrier to a successful MRI scan was poor communication either between healthcare services or between patients and practitioners. Non-disclosure of autism occurred in more than half of the responses (53.6%). Failure to provide customised MRI examinations or autism-friendly MRI environments with reasonable adjustments (82.9%) were major contributing factors to a poor patient experience.

Conclusion: Current practice in MRI scanning is not taking into account the autistic service user's needs. Optimal communication throughout and provision of reasonable environment adjustments is vital to ensure inclusive MRI scanning practices.

Limitations: Both research design and methodology, and recruitment of participants were impacted by COVID-19 restrictions. Convenience sampling means results should be interpreted with caution.

Ethics committee approval: School of Health Sciences, City, University of London Research Ethics Committee [ETH1920-1988].

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Author Disclosures:

Claudia Sa dos Reis: Nothing to disclose
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RPS 1214-7

Autism-friendly MRI: the radiographers' perspective through a UK-wide survey

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Purpose: To explore radiographic practices, training/educational needs, as well as the UK radiographers' perspectives when scanning autistic service users with MRI.

Methods or Background: An online survey was constructed on Qualtrics and pilot-tested by field experts. All UK-based MRI radiographers were invited to participate. The snowball sampling technique was employed. The survey was distributed by three recruitment agencies between December 2020 and February 2021 on social media. Descriptive and inferential statistics were used to analyse the results using the SPSS software.

Results or Findings: This study received 130 valid responses. Effective communication between the patient and the MRI radiographer, adjusted MRI unit environment, and customisation of the MRI examination were found to be beneficial for a successful MRI examination. However, a persistent lack (but also desire) of autism-related training was noted (75.6%). Poor patient-practitioner communication, lack of training (41.5%), lack of Special Educational Needs experts (38.6%), and lack of specific guidelines (37.7%), were the main barriers to a successful MRI examination.

Conclusion: Reasonable adjustments are required when scanning autistic individuals, mainly in the context of communication and the MRI unit environment. Formal training is required for MRI radiographers, and guidelines should also be established to assist them in clinical practice.

Limitations: The number of responses and the use of convenience sampling mean that the results cannot be seen as representative of the UK-based MRI radiographers, but they still offer some useful insights. Also, the COVID-19 pandemic has negatively impacted the recruitment of radiographers as they were working on the frontline during the second national lockdown.

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RPS 1214-8

Evaluating the effect of music on anxiety during mammography cancer screening

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Purpose: This study aimed to investigate whether the introduction of music medicine (MM) during mammography examinations, has an effect on the anxiety level experienced by clients undergoing breast cancer screening.

Methods or Background: This study followed a quantitative, prospective, and experimental design. Participants were imaged according to the local breast cancer screening protocol, with the experimental group being exposed to MM, selected based on the literature. Anxiety levels were measured before and after each mammogram via the State-Trait Anxiety Inventory for Adults research tool.

Results or Findings: Participants in both experimental and control groups experienced a statistically significant increase in anxiety levels before the mammogram, when compared to their normal anxiety levels ($p < 0.001$). Both groups experienced a statistically significant decrease in anxiety levels after the mammogram when compared to their anxiety levels before the mammogram (experimental group: $p = 0.005$; control group: $p = 0.001$). No significant statistical difference ($p = 0.907$) in the anxiety levels after the mammograms was recorded between the experimental and control groups.

Conclusion: Anxiety levels indicated that mammography screening induces anxiety and that anxiety levels were reduced in both groups after the mammography examination. A variable contributing to this reduction could be MM. Thus, MM could be used in the clinical setting since it is non-invasive and cheap. Nonetheless, in this study MM had no statistical significant effect in decreasing anxiety levels during mammography screening.

Limitations: Due to the cost of the research tool, the study had a small sample size ($n = 50$). Thus, only MM was investigated as a variable and no music choice was given to participants. Further studies with a larger sample size, a choice of music from different genres and investigating other variables which affect anxiety levels are recommended.

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Sara Ellul: Author: Not applicable

10:30-11:30

Channel 4

Research Presentation Session: Musculoskeletal

RPS 1310 Knee joint

Moderators

M. Tzalonikou; Athens/GR
L. E. Derchi; Genoa/IT

RPS 1310-3

Sensitivity of DECT in ACL tears: a prospective study with arthroscopy as reference method

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Purpose: To investigate the diagnostic accuracy of dual-energy CT (DECT) for the detection of ACL tears in the acutely and subacutely injured knee with arthroscopy as reference method.

Methods or Background: Patients with suspected ACL injury were imaged with DECT (Somatom Force, Siemens Healthcare, Germany) and 3.0 T MRI (Ingenia, Philips Medical Systems, Best, The Netherlands). Clinically blinded images were independently read by two radiologists. ACL was classified as normal or abnormal. Arthroscopy served as reference standard. Sensitivity and positive predictive value (PPV) were calculated. Also, sensitivity between DECT and MRI was assessed.

Results or Findings: 48 patients (26 M, 22 F, mean age 23 years, range 15-37 years) were imaged a mean 25 days following trauma. Of these, 21 patients