

# Library Current Awareness Bulletin

## Radiology – November 2019

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Section	Page(s)
<a href="#">News</a>	1
<a href="#">Data and Statistics</a>	1
<a href="#">Diagnostic Radiology</a>	2-3
<a href="#">Education and Research</a>	3
<a href="#">Interventional Radiology</a>	3-4
<a href="#">Patient Experience</a>	4-5
<a href="#">Technology</a>	5

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### News

#### [2019 Diagnostic Radiography Workforce Census Launched](#)

The Society of Radiographers  
Nov 2019

#### [Nurse Injured in MRI Accident at Swedish Hospital](#)

Fornell, D.  
*Imaging Technology News (itn)*  
Oct 2019

#### [UK centres to undertake 'world-leading' radiotherapy research](#)

The Society of Radiographers  
Nov 2019

#### [Update on radioisotope imports](#)

The Royal College of Radiologists  
Oct 2019

### Data & Statistics

#### [Diagnostic Imaging Dataset Statistical Release: Provisional monthly statistics, June 2018 to June 2019](#)

NHS England and NHS Improvement, Performance Analysis Team  
Oct 2019

## Diagnostic Radiology

### [A curious case of bony streaks and stripes due to osteopathia striata](#)

Sridharan, K. et al

*Postgraduate Medical Journal*, Epub ahead of print

Oct 2019

[A short one page article, discussing osteopathia striata (Voorhove's syndrome) and the case of a 47 year old woman who was diagnosed with this benign sclerosing skeletal dysplasia after presenting with pain in her lower back, hip and lower limbs following a road traffic accident.]

### [Computed tomographic colonography: how many and how fast should radiologists report?](#)

Obaro, A.E. et al

*European Radiology*, vol. 29(11) pp. 5784-5790

Nov 2019

[This retrospective observational study aimed to determine if polyp detection at computed tomographic colonography (CTC) is associated with (a) the number of CTC examinations interpreted per day and (b) the length of time spent scrutinising the scan. Data for CTC examinations from two hospitals was used to identify how many CTCs had been interpreted and how long radiologists spent on interpretation in the period 2012-2015.]

### [Fluoroscopy-guided spine injections: establishing a successful service in your radiology department or practice](#)

Deshmukh, S. et al

*Skeletal Radiology*, Epub ahead of print

Oct 2019

[An editorial discussing the components of a successful spine injection service, based on the experience of radiologists at Northwestern Memorial Hospital in Chicago. Considers the recruitment of team members, physician referrals, methods of optimising patient care, medication choice, and safety considerations.]

### [Is serial radiological evaluation of one-part proximal humeral fractures necessary?](#)

Jaczens, M. et al

*The Bone & Joint journal*, vol. 101 pp. 1307-1312

Oct 2019

[This cohort study aimed to determine the need for serial radiological evaluation in one-part proximal humerus fractures by describing the clinical history and predictors of secondary displacement in patients presenting with these injuries. The cohort included 41 men and 59 women with a mean age at time of injury of 57 years.]

### [Noninvasive Mapping of Premature Ventricular Contractions by Merging Magnetocardiography and Computed Tomography](#)

Aita, S. et al

*JACC: Clinical Electrophysiology*, vol. 5(10) pp. 1144-1157

Oct 2019

[This study, composed of 22 candidates referred for catheter ablation of idiopathic premature ventricular contraction (PVC), aimed to develop a novel PVC mapping method to predict PVC origins in whole ventricles by merging a magnetocardiography (MCG) image with a cardiac computed tomography (CT) image.]

### [Precise diagnosis of intracranial haemorrhage and subtypes using a three-dimensional joint convolutional and recurrent neural network](#)

Ye, H. et al

*European Radiology*, vol. 29(11) pp. 6191-6201

Nov 2019

[This study aimed to evaluate the performance of a novel three-dimensional (3D) joint convolutional and recurrent neural network (CNN-RNN) for the detection of intracranial hemorrhage (ICH) and its five subtypes (cerebral parenchymal, intraventricular, subdural, epidural, and subarachnoid) in non-contrast head CT. A total of 2836 subjects (ICH/normal, 1836/1000) from three institutions were included in this retrospective study, with a total of 76,621 slices from non-contrast head CT scans. Predictions were compared with the interpretations from three junior radiology trainees and an additional senior radiologist.]

### [Radiographers' perspectives' on Visual Grading Analysis as a scientific method to evaluate image quality](#)

Precht, H. et al

*Radiography*, vol. 25 pp. s14-s18

Oct 2019

[A narrative review discussing the strengths and limitations of a Visual Grading Analysis (VGA) method for image quality evaluation. Considers how to design a suitable VGA study including the following elements; image quality criteria; the number of images included; intra-observer variability, display platforms; statistical tools.]

## Education and Research

### [Constructing an experiential education model in undergraduate radiology education by the utilization of the picture archiving and communication system \(PACS\)](#)

Chen, Y. et al

*BMC Medical Education*, vol. 19(1) p.383

Oct 2019

[This study aimed to evaluate a modified experiential education method and its effect on undergraduate radiology education at the Medical School of Sun Yat-sen University in China. 40 students were allocated to the experiential education group which practiced radiology interpretation using PACS. 61 students were allocated to the control group which could view typical imaging layers with traditional computer media including PowerPoint and Word. The experiential education method showed greater efficacy in improving students' analysis and diagnostic skills and their self-confidence.]

### [International co-operation in biological research to address low dose radiation risk: Osaka Call-for-Action](#)

Weiss, W. and Yonekura, Y.

*International Journal of Radiation Biology*, vol. 95(10) pp. 1351-1353

Oct 2019

[This article discusses the biological effects of radiation and medical exposures. Includes the conclusions from the *International Workshop on the Biological Effects of Radiation – Bridging the Gap between Radiobiology and Medical Use of Ionizing Radiation (BER2018)* which was held at Osaka University on 19-21 March 2018.]

### [The pop-up research centre – Challenges and opportunities](#)

Toomey, R.J. et al

*Radiography*, vol. 25 pp. s19-s24

Oct 2019

[Using the experiences of the authors, this article provides an overview of 'pop-up' research and its potential for accessing sufficient participants to run a study. Considers the following aspects; study design, approvals, equipment and software, environment, participant recruitment and management, research teams and activity costs.]

## Interventional Radiology

### [Characteristics of patients treated for active lower gastrointestinal bleeding detected by CT angiography: Interventional radiology versus surgery](#)

Pannatier, M. et al

*European Journal of Radiology*, vol. 120

Nov 2019

[All patients admitted to an emergency department for acute lower gastrointestinal bleeding (LGIB), proven by CT angiography (CTA), from 2004 to 2017, were divided into two groups depending on whether they first underwent interventional radiological (IR) or surgical treatment. Two radiologists reviewed CTA and angiographic images. Patients' hemodynamic and clinical parameters, delay between imaging and treatment, procedure characteristics, and outcomes were investigated to detect differences between the two groups.]

[Effect of a dedicated inferior vena cava filter retrieval program on retrieval rates and number of patients lost to follow up](#)

Salei, A. et al

*Diagnostic and Interventional Radiology*, Epub ahead of print

Oct 2019

[The records of two groups of patients were reviewed to assess the efficacy of a dedicated inferior vena cava (IVC) filter program which began in 2016. One group had retrievable IVC filters placed by interventional radiology (IR) nine months before the programme (31 male, 45 female) and the other group had the same procedure nine months after the programme (59 male, 47 female).]

[Percutaneous cryoablation of subcapsular hepatocellular carcinoma: a retrospective study of 57 cases](#)

Wang, F. et al

*Diagnostic and Interventional Radiology*, Epub ahead of print

Oct 2019

[57 patients with subcapsular (<1 cm from the liver edge) hepatocellular carcinomas (HCCs) (68 lesions), who were treated with CT-guided percutaneous cryoablation at a single hospital between 2016 and 2018 were retrospectively included in this study to evaluate the safety and effectiveness of the percutaneous cryoablation for HCC.]

[Provision of interventional radiology services, second edition](#)

The Royal College of Radiologists

Sep 2019

[This document, produced by the RCR and the British Society of Interventional Radiology, demonstrates the range of services offered by interventional radiologists and sets out the core requirements for the provision of an IR service both in district general hospitals and tertiary or teaching hospitals, advising on how services may be set up collaboratively within regions to offer the highest quality of care to patients.]

[Transhepatic inferior vena cava filter retrieval due to chronic occlusion of jugular and subclavian veins.](#)

Dionisio, R.G. et al

*Radiology Case Reports*, vol.14(11) pp. 1385-1388

[A 55-year-old woman with myeloproliferative disorder, complicated by venous thrombosis, was referred to interventional radiology for removal of an inferior vena cava filter placed 5 months prior for mechanical prophylaxis in the setting of femoral orthopedic surgery. Due to the patient's chronic occlusion of the bilateral jugular and subclavian veins, a transhepatic approach was used to retrieve the filter successfully without immediate complications.]

## Patient Experience

[Can radiology reflect patient satisfaction after hallux valgus surgery?](#)

Baca, E. et al

*Eklemler Hastalıkları ve Cerrahisi [Joint Diseases & Related Surgery]*, vol. 30(3) pp.241-245

Dec 2019

[This study aimed to define the first web space length (FWSL) as a new radiologic parameter, which may reflect patients' subjective satisfaction and be associated with American Orthopedic Foot and Ankle Society (AOFAS) score as an objective parameter. 114 patients (11 males, 103 females) who underwent distal osteotomy between 2010 and 2018 were retrospectively reviewed.]

[Oncology patients' experience of a routine surveillance CT examination: Relationships and communication](#)

Raaschou, H. et al

*Radiography*, vol. 25(4) pp. 308-313

Nov 2019

[21 semi-structured interviews were conducted with oncology patients to explore their experiences of the CT examination and their need for relationships and communication with the radiographer as part of the CT examination. Four themes were constructed based on the analysis: 1. The professional radiographer, 2. Disease and treatment, 3. The examination environment and 4. While waiting.]

[Transforming imaging services in England: a national strategy for imaging networks](#)

NHS England and NHS Improvement

Nov 2019

[This strategy sets out a proposal for implementing collaborative imaging networks on a national basis across England, delivering better quality care, better value services for patients and providing NHS staff opportunities to develop their career and increase their productivity.]

## Technology

[DyeVert for reducing contrast media in coronary and peripheral angiography: Medtech innovation briefing \[MIB196\]](#)

NICE

Nov 2019

[Medtech innovation briefings are NICE advice for considering new medical devices and other medical or diagnostic technologies. This briefing is for DyeVert which is intended to reduce the amount of contrast media given during coronary and peripheral angiographies. Included studies involved 381 adult patients, 274 of whom had DyeVert in a secondary care setting. These studies showed a reduction in the amount of contrast media given to the patient when DyeVert was used. Evidence about how DyeVert effects the incidence of CI-AKI is limited.]

[Ethics of Artificial Intelligence in Radiology: Summary of the Joint European and North American Multisociety Statement](#)

Geis, J.R. et al

*Journal of the American College of Radiology*, vol. 16(11) pp. 1516-1521

Nov 2019

[A condensed summary of an international multisociety statement on ethics of artificial intelligence (AI) in radiology produced by the ACR, European Society of Radiology, RSNA, Society for Imaging Informatics in Medicine, European Society of Medical Imaging Informatics, Canadian Association of Radiologists, and American Association of Physicists in Medicine. Considers the potential and pitfalls of widespread use of AI in radiology and areas for future research.]

[Impact of artificial intelligence on radiology: a EuroAIM survey among members of the European Society of Radiology](#)

*Insights into Imaging*

Oct 2019

[Reports the results of a survey conducted among European Society of Radiology (ESR) members in November and December 2018, asking for expectations about artificial intelligence in 5-10 years. Of 24,000 ESR members contacted, 675 (2.8%) completed the survey, 454 males (67%), 555 (82%) working at academic/public hospitals.]

[Radiomics with artificial intelligence: a practical guide for beginners](#)

Koçak, B.

*Diagnostic and Interventional Radiology*, vol. 25(6) pp. 485-495

Nov 2019

[A narrative review which aims to familiarise radiologists with radiomics and AI, encourage radiologists to get involved in these fields, and to provide a set of recommendations for good practice in design and assessment of future works.]

### Airedale NHS Library

The library is open Monday to Friday 9am to 5pm.

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