



Preliminary Clinical Evaluation what is its value in clinical practice?

Lisa Pittock,
MSc Clinical Reporting Programme Director
Canterbury Christ Church University



- ▶ Review of abnormality detection systems
- ▶ Definition of PCE
- ▶ Education in PCE
- ▶ Barriers
- ▶ Alternatives

- ▶ And...

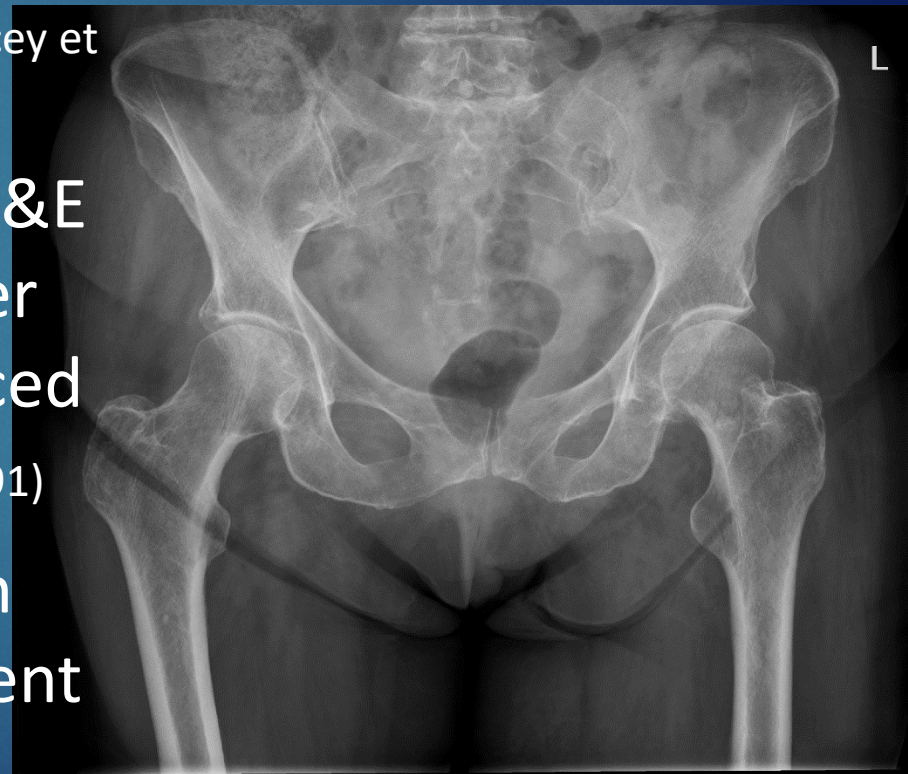
- ▶ A few cases throughout – test your PCE skills



Radiographer led abnormality detection systems



- ▶ Started as the red dot system over 30 years ago (Berman, de Lacey et al, 1985)
- ▶ Aimed to address errors in A&E and for radiographers to offer advice to (often) inexperienced casualty officers (Renwick et al, 1991)
- ▶ Reduce the costs of litigation and negative impact on patient management



Case 2

Radiographer led abnormality detection systems



- ▶ But...Renwick (1991) found that radiographers often overcalled cases compared with the definitive report
- ▶ Loughran's study (1994) showed that with 6 months training (tutorials and assessments) performance improved significantly
- ▶ Other studies concur with this conclusion (Hargreaves & Mackay, 2003; Piper & Paterson, 2009)
- ▶ However there was no national expectation of training or standard protocol eg. Red dot for a tumour or other non trauma abnormalities

Red Dot – not a perfect system?



- ▶ Can be unreliable – usually no training. Confusion possible if more than 1 pathology. Some staff may choose not to participate
- ▶ Now:
- ▶ “Clinical imaging examinations undertaken by radiographers should receive an immediate preliminary clinical evaluation ...to assist in on-going patient management .”



Case 3

(COR, 2013)

Preliminary Clinical Evaluation – what's it about?

- ▶ It replaces the 'Red Dot' system traditionally used in skeletal radiography

The screenshot shows the SoR website interface. At the top, there is a search bar and a navigation menu with links like 'Home', 'Public and Patient', 'About radiography', 'About us', 'Being a member', 'Learning', 'Career progression', 'Practice', 'Trade union support', and 'Around the UK'. Below the navigation, there is a breadcrumb trail: 'Home > Learning > Library and publications > Policy & guidance document library > Preliminary Clinical Evaluation and Clinical Reporting by Radiographers: Policy and Practice Guidance'. The main content area features a green 'SoR Professional Document' icon, the title 'Preliminary Clinical Evaluation and Clinical Reporting by Radiographers: Policy and Practice Guidance', and publication details: 'Published: 11 February, 2013', 'Topics: Reporting', and 'ISBN: 978-1-906225-36-0'. A 'Summary' section follows, containing a paragraph about diagnostic radiographers' roles. Below the summary is a 'Contents of this document' section with a list of sections and their word counts: Foreword (276 words), 1.0 Introduction (450 words), 2.0 The College of Radiographers' position in 2012 (540 words), 3.0 Radiographers and preliminary clinical evaluation (412 words), 4.0 Clinical reporting by radiographers (205 words), 5.0 A framework to support preliminary clinical evaluation and clinical reporting by radiographers (610 words), and 6.0 Implementing preliminary clinical evaluation and clinical reporting (607 words). On the right side, there is a 'Search this document' box and a table of contents with expandable sections: Foreword, 1.0 Introduction, 2.0 The College of Radiographers' position in 2012, 3.0 Radiographers and preliminary clinical evaluation, 4.0 Clinical reporting by radiographers, 5.0 A framework to support preliminary clinical evaluation and clinical reporting by radiographers, 6.0 Implementing preliminary clinical evaluation and clinical reporting, References, and Appendix 1. At the bottom right, there is a 'Learning' section with expandable options for 'Education approval and accreditation' and 'Student zone'.

The cover of the document features the 'docLibrary' logo, which includes a stylized figure holding a book, and the text 'Professional & Trade Union Titles'. Below the logo, the title 'Preliminary Clinical Evaluation and Clinical Reporting by Radiographers: Policy and Practice Guidance' is prominently displayed. Underneath the title, it states 'Responsible person: Charlotte Beardmore' and 'Published: Monday, February 11, 2013' with the ISBN '978-1-906225-36-0'. A 'Summary' section follows, containing a paragraph about diagnostic radiographers' roles. The cover has a clean, professional layout with a white background and blue accents.

The Society of Radiographers (SoR) Preliminary Clinical Evaluation and Clinical Reporting guidance (2013).



HCPC Recommendations

Standards of Proficiency – Radiographers

All radiographers should be able to:

- ▶ distinguish between normal and abnormal appearances evident on images
- ▶ appraise image information for clinical manifestations and technical accuracy
- ▶ take further action as required
- ▶ to be able to distinguish disease and trauma processes as they manifest on diagnostic images

At point of
registration



Case 4

The SCoR definitions of PCE

▶ Preliminary Clinical Evaluation:

“The term used to describe the practice of radiographers whereby they assess imaging appearances, make informed clinical judgements and decisions and communicate these in written forms to referrers.

...Where a radiographer is unable to provide a preliminary clinical evaluation this must be communicated to the referrer in written form”

- ▶ All diagnostic examinations undertaken by radiographers *‘should receive an immediate preliminary clinical evaluation as part of the examination to assist in on-going patient management’*.
- ▶ Ongoing education and training is key to this

COR, 2013

REMEMBER: PCE is not reporting, it is an informal comment

Current UG education and into practice

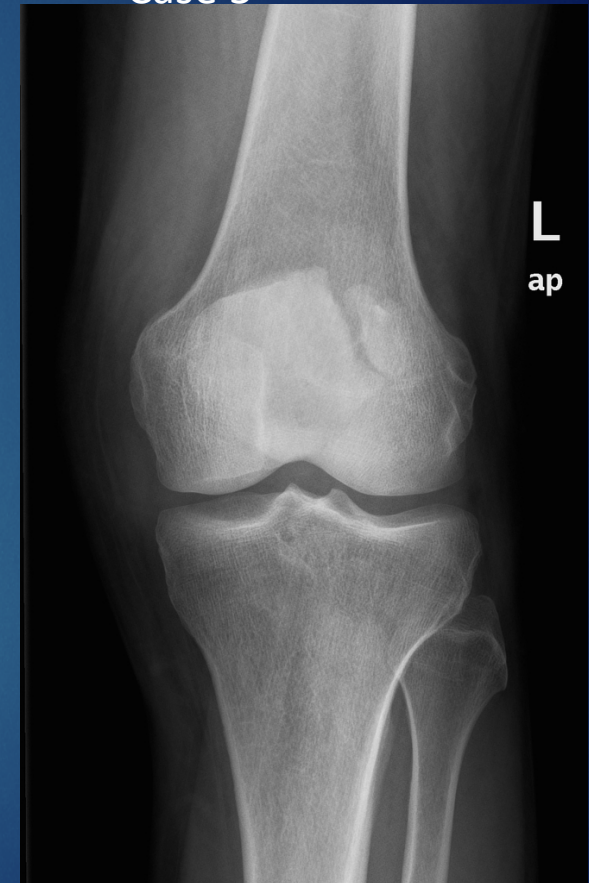
- ▶ Image interpretation/ PCE are core components of HEI curricula (Stevens & White, 2018)
- ▶ Education required in workplace to support ongoing competency and varying range of ability/ knowledge
- ▶ Structuring the PCE – guidance on how to write it (Neep et al, 2013)

Take up of PCE



- ▶ Uptake has been slow
- ▶ Lack of confidence and inadequate training?
- ▶ Practical aspects of adding a PCE to PACS/RIS
- ▶ Twitter feed last week – what methods used:
 - ▶ Sticky note in PACS
 - ▶ RIS comment but not linked to PACS
 - ▶ Red dot on image – comment on RIS
 - ▶ Resistance from radiographers (prefer red dot)

Case 5

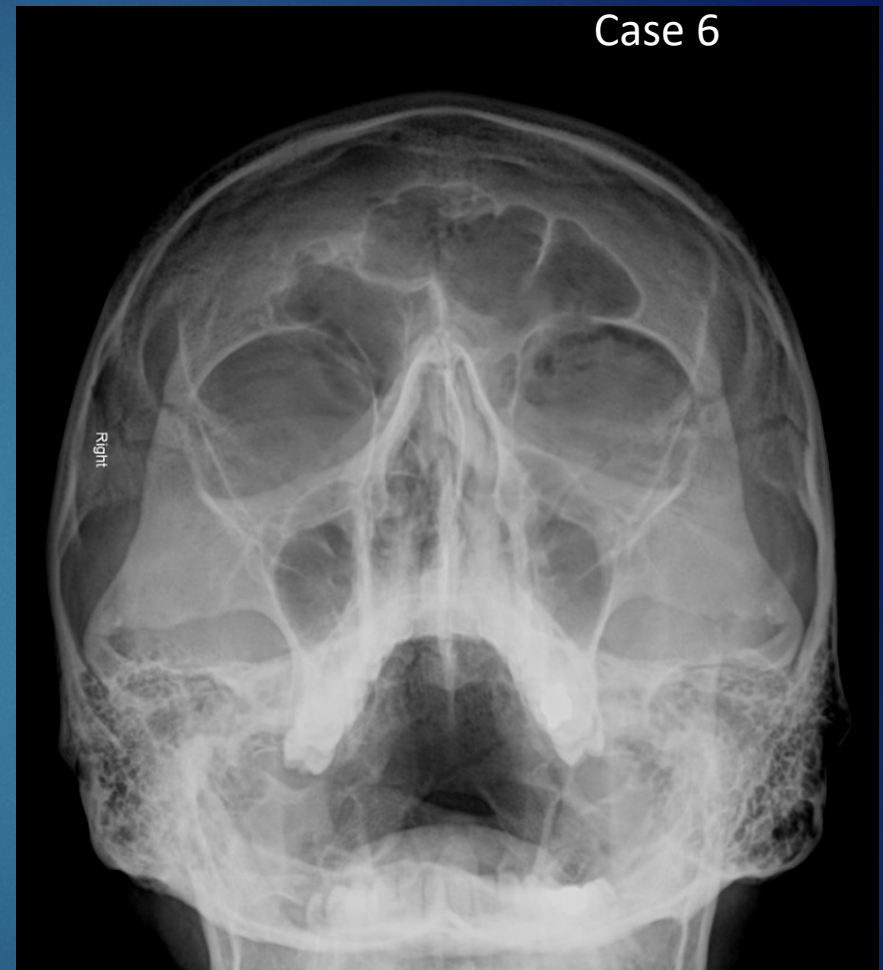


Case courtesy of Dr Hani Salam,
Radiopaedia.org, rID: 12979

Do we need PCE?

Common missed diagnoses:

- ▶ Lunate/perilunate dislocations
- ▶ Elbow fractures eg. Avulsed medial epicondyle
- ▶ Lisfranc injuries
- ▶ Pneumothoraces
- ▶ Misplaced NG tube (not just for A&E referrals?)
- ▶ Red flag signs. Initial evaluation in MRI or other modalities – not just for DR/CR?



How to approach PCE commenting



- ▶ Analyse the images and all other relevant information
- ▶ Identify both normal and abnormal structures
- ▶ Review the normal and abnormal structures with reference to the request
- ▶ Use technical language
- ▶ Draw a conclusion based on the above factors
- ▶ Does NOT confirm a definitive diagnosis but may help to inform the patient's management

PCE education



- ▶ UG education
- ▶ CPD sessions by reporting radiographers – ongoing
- ▶ E-Learning for Healthcare
- ▶ Other online or taught programmes

The screenshot shows the e-Learning for Healthcare (e-LfH) website. At the top left is the e-LfH logo with the tagline 'e-Learning for Healthcare'. At the top right is the NHS Health Education England logo. Below the logo is a navigation menu with links for Home, Programmes, About, News, Support, Demo, and Contact us. A search bar is located on the right side of the navigation menu. Below the navigation menu is a 'Sections' dropdown menu. The main content area features a large banner for 'Image Interpretation' with the subtitle 'Interpretation of Radiological Images'. To the right of the banner are four small images: an ultrasound scan, an MRI scan, a CT scan, and an X-ray of a hand. Below the banner is a blue bar with the text 'This programme is in partnership with...'. At the bottom of the page are two logos: the Society of Radiographers (SoR) logo and the 'cpd now' logo, which is endorsed by the College of Radiographers.

Alternatives...

- ▶ Increased use of radiologists – unlikely with current radiology workforce issues
- ▶ 24 hour reporting service - expensive
- ▶ Increased use of reporting radiographers
- ▶ Immediate reporting within “busier” periods. Study by Snaith et al (2013) found immediate reporting reduced interpretive error and patient recall rates for MSK

What does research tell us?



- ▶ There is variation in radiology reporting agreement at all levels
- ▶ With suitable training radiographers can report to similar standards as radiologists
- ▶ “Radiographers are in a unique position to communicate their professional observations directly with the treating clinician in a timely manner and thereby have a significant influence on patient care” (Woznitza, 2014)
- ▶ PCE has a role to play in supporting patient care

What do we offer at CCCU?

Non credit bearing short course or web based course

Preliminary Clinical Evaluation: Appendicular Skeleton

February - May 2020

Who is the short course aimed at?

This short course is for radiographers and other practitioners who record interpretation findings to inform immediate patient management.

Aim

The aim of the course is to equip practitioners with the skills needed to provide an immediate Preliminary Clinical Evaluation 1 (PCE) on the radiographic appearances of trauma images of the appendicular skeleton.



¹ Team working in clinical imaging (2012)

A Joint Document from The Royal College of Radiologists and The College of Radiographers

Course content

Study sessions will be led by clinical experts and leading academic staff. The course is based on current materials which are used as part of an established postgraduate programme.

You will:

- > Participate in image based workshops where you will consider the common errors and pitfalls in the subject;
- > Be given hints and tips to improve descriptions, terminology and phrasing used to describe and communicate findings in an initial commentary;
- > Use up-to-date technology including the exclusive use of digital images within an interactive workstation environment;
- > Learn about legal and professional issues, including the audit of practice.

Following the study sessions, you will be issued with a Certificate of Attendance. You may also have the opportunity, (subject to satisfactory selection), to complete an accredited module (20 credits) at Level III or Masters Level, which forms part of the MSc Clinical Reporting programme.

Duration

February – May 2020

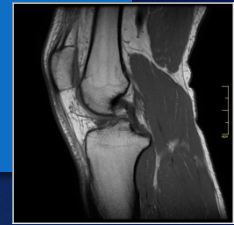
Cost

Study sessions and certificate of attendance £625
Completion of accredited module £855

For further information or to request an application form, please contact Lisa Pittock by email

lisa.pittock@canterbury.ac.uk or call

01227 923825



Case answers



1. Tarsometatarsal dislocation on lateral ankle – needs further foot imaging
2. Impacted transcervical fracture left neck of femur
3. Lunate dislocation on DP wrist
4. Limbus vertebra – normal variant
5. Bipartite patella
6. Right eyebrow sign – intraorbital emphysema from likely blow out fracture



Thank you
Any Questions?



REFERENCES

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