

# Is the teaching of skeletal image interpretation at undergraduate level effective in preparing students for professional practice?

Willis SJ<sup>1</sup>, Heales CJ<sup>1</sup>, Cousens C<sup>2</sup>, Iyengar S<sup>2</sup>, Knapp, KM<sup>1</sup>

<sup>1</sup>School of Physics, University of Exeter, <sup>2</sup>Peninsula Radiology Academy, Plymouth

## Background

Image interpretation is increasingly becoming part of the radiographer's role, with many hospitals having implemented a Radiographer Abnormality Detection System (RADS), more commonly known as a "red dot" system [1]. At practitioner level new graduates are required to be able to perform a full range of general and modified radiographic techniques but are unlikely to be required to undertake image comment writing without additional experience, education and support.

## Context

Skeletal Image Interpretation was embedded into a third year module on the BSc (Hons) Medical Imaging (Diagnostic Radiography) programme, to better equip graduates with the skills commensurate with current employment requirements. The aim of this module is to provide the basic knowledge and "rules" required to improve the image interpretation abilities of the student radiographers, thus enhancing their future employability. This was developed in collaboration with the Peninsula Radiology Academy in Plymouth.

## Aim

The overall aim of the study was to investigate the effectiveness of 3<sup>rd</sup> year skeletal image interpretation module on student radiographers' perception of their preparedness to practice.

## Method

Final year undergraduate radiography students (n=51) from the 2007-08 cohort were invited to participate in the study. Data were gathered, in June 2008, using questionnaires which were distributed using a census sampling method. A response rate of 71% (n=36) was achieved.

## Results and Discussion

97% of students felt the module improved their image interpretation skills, 92% felt they were better able to identify abnormalities on a range of skeletal images and 89% felt the module contributed to an improvement in their practical radiographic skills.

These data clearly suggest that this module has reinforced the students awareness of their own radiographic technique; as the module had provided them with a better understanding of what is required for an image to be reported.



## Conclusions

It is unlikely that these students will undertake image comment writing upon graduation. Nevertheless the results from the study suggest that students felt that the module had not only improved their image interpretation abilities but had also had a positive impact upon their practical radiographic skills, thereby further enhancing their preparedness for professional practice.

## Ethics

Ethical approval was granted, by the School of Physics Ethics Committee, University of Exeter prior to the commencement of data collection.

## References

[1] Hargreaves, J. and Mackey, S. (2003) 'The accuracy of the red dot system: can it improve with training?' *Radiography* 9, pp283-289.