COMPUTERS IN RADIOLOGY

A BRIEF INTRODUCTION TO TEACHING FILE SYSTEM AND RADLEX

Kashif Mirza

Canada.

PJR October - December 2012; 22(4): 150-151

In today's era of information technology, where all field in healthcare are unfolding various aspects of using IT; Radiology has almost reached to a level of implementing IT potential to its maximum strengths. Though IT advantages and disadvantages are still under debate in developing world but few upgrades have now started looking like no turning back (such in Computed Radiography).

In this article, few of IT benefits have been revisited with special focus on implementing them in a developing world like Pakistan. This article reviews IT software which are available with minimal cost implications in comparison to their tremendous benefits.

With focus on Education and quality in radiology, RSNA (Radiological society of North America) develops and offers informatics-based software solutions. RSNA provides IT resources in improving radiology practice through its website. RSNA website, broadly categorizes use of IT in three major heading (Such as Quality and Patient Safety, Image Share and Processes). In this article, we will focus on Software which are particularly useful in quality and Patient safety improvements in radiology setups in Pakistan.

MIRC® Teaching File System (TFS): Teaching hospitals which are providing undergraduate ad postgraduate training in Radiology, will find this software very useful. With a huge collection of teaching cases from teaching hospitals and other radiology setups, TFS lets you search radiology cases instantly through website. Salient features include (1) Simple and detailed radiology case creation in a shareable format, (2) Easy development of personal or departmental library and (3) Locally saving or sharing your teaching cases with radiology community. Development of TFS is overseen by Radiology Informatics Committee under RSNA; and software is available for free to download and install. Further details regarding features, download and installation are available through http://www.rsna.org/tfs.aspx.

RadLex: Institutions which are actively involved in radiology teaching and quality improvements will find this comprehensive lexicon useful. Radlex helps users to dictate radiology reports, organize information and retrieve data for research and quality control. Radlex can be used for standardized indexing and retrieval of radiology information resources. It is a unified language of radiology terms, replacing ACR (American Collelge of radiology Index) for radiology diagnosis. To further experience Radlex use and explore its potential in your particular setup, RSNA has developed "RSNA Playbook" which is accessible through http://playbook.radlex.org.

In addition to TFS and Radlex, RSNA also supports patient image sharing among diagnostic centers through standardization under IHE (Integrating the Healthcare Enterprise). Image sharing is particularly useful for physically distant radiology centers aiming to share patient images. Built on the concept of computer network connectivity of imaging machine, PACS (Picture Archiving and Communication network) and Web, one can use IHE as a detailed guideline for purchase and implementation of meaningful image sharing for patient's benefits. The same concept is further extended to share images using Patient Health Records (PHR).

Correspondence : Dr. Kashif Mirza

Canada

Email: dr.kashifmirza@gmail.com

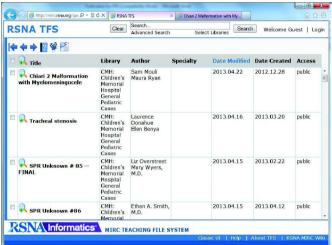
ORIGINAL ARTICLE

For running and supporting above software in radiology setups in Pakistan, Radiologists and administrator would require a good computer infrastructure covering digital imaging machine, data archive and network connectivity. Financially speaking, with minimal hardware investment, all software explained above are sponsored by RSNA and are available for free to download and use. Only component which might require a continuous support is human resource for running the computer setup. Fortunately, as radiology setups in Pakistan are adopting digital machine and network connectivity, all is becoming practically doable even under limited budget.

For further details on RSNA informatics section, please visit http://www.rsna.org/Informatics.aspx.

Conflict of Interest: None





RPID	Short Name	Long Name	Long Description
RPID1	CT ABD PELVIS LE ANGIO WO & W IVCON	CT ABDOMEN PELVIS LOWER EXTREMITY ANGIOGRAPHY WITHOUT THEN WITH IV CONTRAST	A computed tomography RADIOLOGY ORDERABLE ANGIOGRAPHY procedure focused on the ABDOMEN and PELVIS and LOWER EXTREMITY WITHOUT THEN WITH IV CONTRAST
RPID2	CT ABD ANGIO WO & W IVCON	CT ABDOMEN ANGIOGRAPHY WITHOUT THEN WITH IV CONTRAST	A computed tomography RADIOLOGY ORDERABLE ANGIOGRAPHY procedure focused on the ABDOMEN WITHOUT THEN WITH IV CONTRAST
RPID3	CT ABD WO IVCON	CT ABDOMEN WITHOUT IV CONTRAST	A computed tomography RADIOLOGY ORDERABLE imaging procedure focused on the ABDOMEN WITHOUT IV CONTRAST
RPID4	CT ABD WO & W IVCON	CT ABDOMEN WITHOUT THEN WITH IV CONTRAST	A computed tomography RADIOLOGY ORDERABLE imaging procedure focused on the ABDOMEN WITHOUT THEN WITH IV CONTRAST