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Nota di bibliografia	Includes bibliographical references and index.
Nota di contenuto	Contents; Contributors; Preface; Acknowledgments; Chapter 1 Detectors for digital mammography; Introduction; Image quality metrics; Indirect conversion with prompt readout; Scintillator; Photodetector; Direct conversion; Digital cassette mammography; Photon-counting mammography; Current status and future trends; Acknowledgments; Disclosures; Chapter 2 Image acquisition; Introduction; Physics of digital mammography; Image acquisition; Digital detectors; Film-screen versus digital mammography; Final thoughts; Chapter 3 Preparing digital mammography images for interpretation; Introduction Image processing in digital mammography Intensity windowing; Unsharp masking; Peripheral equalization; Contrast-limited adaptive

histogram equalization; Digital mammography soft-copy and hard-copy display; Soft-copy hanging protocols and image annotation; Chapter 4 Image display and visualization in digital mammography; Introduction; Image display workstations for digital mammography; Monitors used in digital mammography; Classification and quality standards for monitors in digital mammography; QC and QA for image display devices in PACS; Chapter 5 PACS, storage, and archiving; Introduction
Languages and communication Health Level 7 (HL7); Digital Imaging and Communications in Medicine (DICOM); Hardware; Network infrastructure; Storage infrastructure; Redundant array of independent (or inexpensive) disks (RAID); Storage tiers; The archiving and backup process; Parameters that play a significant role in image archival/retrieval; Image size; Processed versus raw images; Growth and new technology; Data compression; Data transmission/telecommunications; Telecommunications carrier considerations; Security; Evaluating and assessing a current or future archive system; Availability
Scalability Fault tolerance; Security; Integration; System management; Performance; Data migration; The archiving history of our facility: a case study; Chapter 6 Interpretation of digital screening mammography; Introduction; Time utilized; Choice of image size and hanging protocols; Post-processing at the monitor; CADe or double reading; Reading environment; Conclusions; Chapter 7 Efficacy of digital screening mammography; Introduction; Equipment; Study methodology; Measures of efficacy: sensitivity and specificity; Alternative measures of efficacy; Cancer detection rate; Recall rate Positive predictive valueReproducibility; Microcalcifications and DCIS; Conclusion; Chapter 8 Artifacts in digital mammography; Introduction; Classification of artifacts in digital mammography; Detector-related artifacts; Single dead detector elements; Multiple dead detector elements; Misread lines; Banding artifacts; Ghosting artifacts; Gantry-related artifacts; Foreign material on the compression paddle; Grid artifacts; Improper collimation; Patient-related artifacts; Patient motion; Unwanted anatomy; Foreign substances on the patient s skin; Processing-related artifacts
Failure of skin-line processing algorithm

Sommario/riassunto

Digital mammography has many advantages over film-screen mammography, including faster acquisition, easier storage and easier retrieval of images. Written by expert radiologists and physicists, Digital Mammography: A Practical Approach compares digital mammography to conventional film-screen mammography, reviews clinical cases and explores newer modalities. Key topics include: • Digital detectors • Monitors • Image acquisition • Image storage, retrieval and transfer • Image interpretation and efficacy • Artifacts • A comparison of commercially available systems • Mobile digital mammography. An image atlas and sections on digital tomosynthesis and computed tomography of the breast enhance the text. Digital Mammography: A Practical Approach melds the worlds of clinical radiology and physics in an easy-to-understand, practical resource. A valuable addition to the shelf of radiologists, radiologic technicians, practising medical physicists and mammography technologists; and any practitioners developing and expanding digital mammography programs.