Learning Outcomes

RADIOLOGY masterclass

Radiology Masterclass Acute CT Brain

Course aims

- To learn or revise knowledge necessary for interpretation of common abnormal appearances of CT images of the brain in the acute setting
- To objectively demonstrate gain of knowledge by completion of a summative and graded online assessment based on the knowledge learned

Course learning outcomes

On completion of the course the practitioner will be able to:

- Describe the anatomical terms commonly used in interpretation of CT images of the brain in the acute setting, and variations seen in old and young patients
- Describe the visible meninges and demonstrate awareness of the limitations of viewing the meninges in the normal subject
- Describe the correct orientation of the brain conventionally used for CT brain image interpretation and describe the terms used for CT brain image reconstruction in orthogonal planes
- Describe the importance of standard and modified window settings required for complete interpretation of CT brain images
- Determine the difference between normal calcification of intracranial structures and pathological entities which cause abnormal high density in the brain or CSF spaces
- Employ a systematic approach to interpretation of CT images of the brain in the setting of acute head injury, cerebrovascular events, and other common acute brain pathologies
- Attribute descriptive terms to the range of common abnormalities seen on CT images of the brain in the acute setting
- Attribute descriptive terms to artifacts commonly seen on CT images of the brain
- Show awareness of the benefits and limitations of CT brain images acquired with and without intravenous contrast administration
- Differentiate between skull sutures and skull fractures
- Describe subtle findings on CT images of the brain which are commonly associated with otherwise occult injuries
- Assess volume of the brain
- Describe terms used for assessment of CT brain images in the context of acute cerebrovascular events and differentiate these from the appearances of chronic events
- Determine the difference in appearance of acute blood depending on the specific intracranial space involved, extra-axial or intra-axial
- Describe differences between primary benign and primary malignant intracranial lesions, and secondary intracranial lesions
- Describe the difficulties in differentiating malignant lesions and brain abscesses
- Assess the degree of mass effect associated with a space-occupying intracranial lesion
- Objectively establish and demonstrate knowledge of CT brain image interpretation in the acute setting, by completion of an online assessment covering knowledge learned (with generation of a personalised and verifiable online – and printable – course completion certificate stating the practitioner's details and mark as a percentage)