What should anesthesiologist know –why radiologists need sedation for CT scan?

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Background& objectives: When we talk about sedation for diagnostic image techniques or even neuroradiology we emphasize the perspective of the anesthesiologist. However, anesthesiologists are here to understand the need of the radiologist and their perspective for having the best possible scan.

Radiologists and patients aspects: Scanning is done after confirming and registration of the patient as well as after careful positioning of patients. Radiologist plan their study according to topo grams. Best time to sedate the patient is before topo gram is acquired because any movement by the patient after acquisition of the topo gram would lead to incorrect imaging. Head scans involve taking serial tomograms while body scans require acquisition of spiral data. Patient movement during acquisition of tomograms/spiral data degrades image. When contrast is given, the size, placement, given amount should be considered. Most favorable place for IV cannula is the arm, as placement in the leg or foot causes pooling of contrast in the lower limb or it may lead to opacification of the inferior vena cava in abdominal CT angiographic studies Fortunately, acquisition of data is over in less than 1 min, after which patient movement does not hamper the quality of the study.

Conclusion: for radiologists no movement from the patients is favorable for quality scan. For patients repeated scans are not suggested in terms of contrast as well as the radiation dose, therefore anesthesiologists and adequate sedation techniques are not exclusiveness but essentials.

MRI evaluation of spinal epidural abscess- case report

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Introduction: Spinal epidural abscess (SEA) is infection in epidural space, intraspinal extradural deteriorating neurological function due to compression. SEA is uncommon and is with incidence 2:3 per 10,000 hospitalizations with peak in 5-7th decades and male predominance. Comorbidities, previous spinal intervention or abnormality and systemic infection are risk factors.

Case report: We present case with clinical symptoms: spinal in thoracic region, fever and neurological deficit, para paresis and underwent MRI of the spine with administration of contrast medium on 1,5T Siemens Avanto. MRI findings include liquid collection in posterior aspect of spinal canal extradural in thoracic region with compression on dural sac. After administration of contrast presence of rim enhancement. This pattern represent spinal epidural abscess. After two weeks treatment with wide specter of antibiotics control MRI showed incomplete resolution of the abscess in addition of good answer of administrated therapy. Dural sac and spinal cord was liberated but we noted spinal cord edema in small region. On the control MRI after three months in short segment of the spinal cord there was hypersignal lesion that in addition to clinical course mostly is associated with post infectious ADEM.

Conclusion: MRI is superior in detecting and differentiation of spinal pathology and accurate in early diagnose, non invasive method that provides information essential in choosing best treatment.