Polytrauma CT protocols, our experience

Igumenova N.
North Estonia Medical Centre, Estonia

The number of CT examinations performed using polytrauma protocol is growing every year, with 95 CT-s performed in 2011 and 222 in 2015. Polytrauma patient management starts with a primary survey followed by chest radiograph, FAST (Focused Assessment with Sonography in Trauma) ultrasound and whole body CT. Chest radiograph is usually skipped in young hemodynamically stable patient with normal auscultatory findings. After FAST examination hemodynamically stable patients undergo a further evaluation with CT. Our CT protocol consists of scout image, unenhanced head examination followed by whole body scan in portal venous phase. The upright position of hands is preferred in the whole body scan to minimize the radiation dose and beam hardening artifacts. Only one hand is placed next to the head in case of an arm injury. In patients with thoracic trauma arms are placed on the body. Arterial phase imaging of abdomen and pelvis is performed as part of the whole-body examination in all FAST positive patients (for better visualization of splenic pseudoaneurysm). Late phase images are performed when needed, usually using low-dose protocol.