

Deformation of the foot, or a part of the foot, acquired through disease or injury can cause variety of foot problems: hallux valgus, hallux rigidus, pes cavus hammer toe, club foot, flat feet, Morton's neuroma, plantar faciitis ect.

There are a lot of factors of foot problems. One condition that alters the functional demands placed on lower limb muscle-tendon units is the use of high-heeled shoes, which force the foot into a plantarflexed position. Long-term HH use has been found to shorten medial gastrocnemius muscle fascicles and increase Achilles tendon stiffness, but the consequences of these changes for locomotor muscle-tendon function are unknown.

X-ray, USG,CT, MRI are the modality very often use by orthopaedists to diagnose the cause of feet problem, so radiologists should be familiar with this problem.

BRACHIAL PLEXUS MR: BASIC ANATOMY AND PATHOLOGY

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Brachial plexopathy is a neurologic disease, that causes pain or functional weakness (or both) of the ipsilateral upper extremity. It may result from medical conditions and from violent stretching, penetrating wounds, or direct trauma. Given the morbidity associated with brachial plexopathy, radiologists should be familiar with plexus anatomy, able to recognize traumatic and nontraumatic plexopathies. It's indispensable to decide about proper medical procedure.

Evaluating the brachial plexus may seem not be easy because of the complexity of the anatomy

and the relative infrequency of dedicated studies, typically in the form of MRI. However, familiarity with the plexus in the context of adjacent, easily identifiable structures and with the typical appearances of plexopathies will allow a more confident evaluation. It will easier to interpret the plexus on nondedicated studies such as MRI or CT of the cervical spine, which is routinely performed in the setting of nontraumatic upper extremity weakness and trauma.

MR allowed to visualised pre- and postganglion parts of plexus and avail the natural contrast between plexus structures ant fat tissue around.

MR is study of choice in evaluating anatomy and pathology brachial plexus (trauma, Pancoast tumour, Thoracic Outlet Syndrome (TOS), schwannoma, iatrogenic disorders ect).

SYNOVIAL CHONDROMATOSIS – DIAGNOSTIC DIFFICULTIES

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Background. Synovial chondromatosis is a rare, benign disorder characterised by neoplastic proliferation of numerous chondral nodules in synovium of joints, bursae or tendon sheaths. The disease is usually diagnosed in the third, fourth and fifth decades of life, twice more often in men. In most cases it affects one joint but may appear bilaterally (in up to 10% of patients). The most common localization is the knee joint.

Computed tomography (CT) imaging is the best method in detecting calcified intraarticular bodies. Magnetic resonance imaging (MRI) may also implicate presence of synovial chondromatosis — on T2-weighted images calcifications are visible as focal areas of signal void in hiperintense fluid with hypertrophic synovium, additionally this technique may show extraarticular extent of disease, if present. Ultrasound examination is an alternative method of imaging synovial chondromatosis.

Case reports. In this article we present two cases of synovial chondromatosis. The first patient was a 14 year old girl, with multiple cartilaginous loose bodies in the knee joint, detected in ultrasound and MRI examinations. The next patient was a 68 year old woman with calcification in the shoulder joint demonstrated in CT and MRI examinations.

Conclusions. Diagnostic imaging plays an essential role in the diagnosis of synovial chondromatosis, still the final diagnosis is set in histopathology examination.

ACUTE POSTTRAUMATIC THORACIC AORTIC CHANGES IN COMPUTED TOMOGRAPHY IMAGING

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Acute traumatic aortic injury (ATAI) is a serious clinical condition in patients after multiple trauma. It results from motor vehicle accidents, pedestrian-automobile collisions and less frequently falls from height. Majority of patients with ATAI are young men.

In this work we present examples of posttraumatic aortic changes, which were stated in CT polytrauma (trauma CT) followed by CT angiography examinations, performed between the year 2010 and 2012 in the CT and MRI Laboratory of Clinical Radiology and Diagnostic Imaging Department in Provincial Hospital No 2 in Rzeszów. The aim of this study is to present morphological variation of posttraumatic aortic injuries and potential CT imaging pitfalls. Widened mediastinal silhouette in CT scoutview (topogram) may suggest presence of posttraumatic changes of the thoracic aorta. In the trauma CT scan hemorrhage may be suggested by a blurred border between the aorta and periaortic adipose tissue, and/or increase of mediastinal adipose tissue density. Sudden change in the outline of aortic walls, extravasation of blood/contrast medium beyond the vessel, and/or separation (tear) of the tunica intima are the probable changes in the CT scan examination after administration of contrast medium. When assessing CT