„Prostata – Multimodale Bildgebung“ F. Aigner, L. Pallwein-Pretter


A rare case of an acute soleus arcade syndrome complicated by a ganglion cyst: diagnosis by dynamic ultrasound.

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The soleus arcade syndrome is a rare compression neuropathy of the tibial nerve.
that often remains undiagnosed due to low clinical awareness and difficult diagnosis. We present the case of a female patient admitted with acute worsening of a pre-existing sensory tibial neuropathy and acute tibial nerve palsy after knee joint injection. After a knee magnetic resonance imaging remained non-diagnostic, dynamic ultrasonography was performed. Constriction by the soleus arcade and proximal swelling of the tibial nerve could be demonstrated during plantarflexion of the ankle by means of a dynamic examination in the standing patient. The patient underwent surgery and recovered fully. This proposed diagnostic approach can be used to identify soleus arcade syndrome by ultrasound.


Muscular injuries of athletes: Importance of ultrasound.

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Muscular injuries represent the most common musculoskeletal lesions. Especially in professional athletes an imaging clarification is essential in order to define the exact location of the lesion, the affected muscles, the extent and degree of the injury as well as to define possible concomitant complications. The best possible therapy can be initiated and a necessary rest period for a low risk resumption of sporting activity can be individually specified. Due to technical improvements, for example mobile devices and thus increased rapid availability as well as relative cost-effectiveness compared to other modalities, the imaging evaluation of muscle injury would nowadays be unthinkable without ultrasound. Despite the known investigator dependence, ultrasound enables a reliable and unerring imaging clarification of muscle injuries. For this reason, ultrasound should be considered as the first-line diagnostic imaging modality when dealing with muscle trauma.


Performance of 4 years of population-based mammography screening for breast cancer combined with ultrasound in Tyrol / Austria.

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Systems for the delivery of screening mammography vary among countries and these differences can influence screening effectiveness. We evaluated the performance of organized mammography screening for breast cancer combined with ultrasound in Tyrol / Austria, an approach that differs from many other population-based screening programs. Data on women aged 40 – 69 years screened in the period from June 2008 to May 2012 were collected within the framework of an organized screening program. A total of 272,555 invitations were sent to the target population living in Tyrol and 176,957 screening examinations were performed. We analyzed the main performance indicators as defined by European Union (EU) guidelines and some important estimates of harms. The estimated 2 year participation rate was 56.9 %. As ultrasound is implemented as second-line screening procedure, 76.2 % of all women screened underwent supplementary ultrasound. In total 2322 women were recalled for further assessment (13.1 per 1000 screens) and 1351 biopsies were performed (7.6 per 1000 screens). The positive predictive value was 28.2 % for assessment and 48.5 % for biopsies. The cancer detection rate was 3.7 per 1000 screens and the proportion of all stage II+ screen-detected cancers was 35.5 %. The interval cancer rate was 0.33 and 0.47 per 1000 screens in the first and second years, respectively. The estimated cumulative risk for a false positive screening result and an unnecessary biopsy for women following the invitation approach was 21.1 % and 9.4 %, respectively. The performance of our population-based screening approach combining mammography and ultrasound is very favorable and potential harm is kept very low compared to other European mammography screening programs for breast cancer.