

Commentary

The first abstract from Edinburgh highlights the prevalence of thromboembolism in the population at large. This is one of the few studies conducted in outpatients and suggests that this phenomenon that is more prevalent than generally believed. The authors suggest that this should be actively sought in all contrast enhanced CTs of the chest. Spondyloarthritis is common and causes significant morbidity. Madsen and Jurik suggest a MR scoring system to classify chronic changes and correlate these to plain radiographs. The conclusion is somewhat surprising and suggests that despite the MR, plain films are still needed for a complete evaluation.

Focussed abdominal Sonogram in Trauma (FAST) is an integral part of assessment of the trauma patient and has replaced both clinical exam and the diagnostic peritoneal lavage (DPL) in this situation. The Greek study confirms the negative predictive value of the investigation. FAST should be the first line of investigation for assessing the abdomen in patient with trauma.

The last abstract is a set of guidelines for use of MR in indeterminate adnexal masses from European Society of Urogenital Radiology. Use of guideline is useful in determining the correct management. Well written, evidence based guidelines such as these help in ensuring that patients are managed in an appropriate and cost effective manner.

Zafar Sajjad

Associate Professor Radiology

Aga Khan University Hospital, Karachi.

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C. Farrell, M. Jones, F. Girvin, G. Ritchie, J.T. Murchison

Department of Radiology, Royal Infirmary of Edinburgh, Edinburgh, UK

Unsuspected pulmonary embolism identified using multidetector computed tomography in hospital outpatients

AIM: To evaluate the incidence of unsuspected pulmonary embolism (PE) in an unselected population of outpatients undergoing contrast-enhanced multidetector computed tomography (MDCT) for indications other than the investigation of PE.

MATERIALS AND METHODS: Outpatients undergoing CT of the chest over a 6-month period were retrospectively identified and images reviewed. Inpatients and patients undergoing unenhanced CT of the chest were excluded. Data, including referring speciality, patient age and sex, reasons for examination, level of embolism, image quality, and section thickness were recorded. Radiology reports were reviewed with respect to whether or not the embolism was noted at the time of initial reporting.

RESULTS: Following exclusions 440 patients were

reviewed (195 women and 245 men). PE was identified in 10 of the 440 patients, an incidence of 2.23%. One pulmonary embolus was in the main pulmonary artery, three were in lobar arteries, three in segmental arteries, and three in subsegmental arteries. Patients over the age of 60 years were more likely to have an embolism (9/300, 2.9%) compared with those under 60 years (1/140, 0.7%). Seven of the 10 positive examinations were carried out in patients who were known or later shown to have malignancy. Seven of the 10 emboli were reported at the time of initial reporting.

CONCLUSION: The outpatient population has a significant incidence of unsuspected PE. PE should be actively sought when reporting examinations performed for alternative indications, particularly where cancer is a known or suspected diagnosis.

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K.B. Madsen, A.G. Jurik

Department of Radiology, Aarhus University Hospital, Arrhus, Denmark

MRI grading method for active and chronic spinal changes in spondyloarthritis

AIM: To describe a magnetic resonance imaging (MRI) grading method for both active and chronic spondyloarthritis (SpA) changes in the spine, to test its validity, and compare chronic MRI scores with findings obtained by radiography.

MATERIAL AND METHODS: A total of 91 patients (41 males; 50 females) with back pain fulfilling the European Spondylarthropathy Study Group (ESSG) criteria for SpA were examined using MRI and radiography of the spine. The mean age was 36.7 years (range 16–51 years) and symptom duration was between 3 and 27 years. The MRI images were assessed for signs of disease activity (bone marrow oedema at the vertebral plates and costo-vertebral joints) and chronic structural changes [syndesmophytes/vertebral fusion, erosion, and fatty marrow deposition (FMD)]. The interobserver agreement was analysed based on 37 examinations. Radiographs were assessed for the presence of shiny

corners, vertebral squaring, syndesmophytes/fusion, and erosion.

RESULTS: The interobserver agreement for the assessed MRI abnormalities was acceptable, with kappa values between 0.62 and 0.77. A total of 56 patients had SpA-related spinal abnormalities as depicted using MRI. The total chronic MRI score was not significantly related to the radiographic score, mainly because syndesmophytes were difficult to detect by MRI and FMD was only visualized by MRI. However, FMD was significantly related to the total radiographic score and vertebral squaring.

CONCLUSION: The described MRI grading method was reliable for assessing both disease activity and chronic changes. MRI is promising for estimating chronic changes, but cervical radiography may still be needed. FMD seems to be an important sign of chronicity.

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Ioannis Kornezos,^{1, 5} Achilles Chatziioannou,² Ioannis Kokkonouzis,³ Panagiotis Nebotakis,¹ Hippocrates Moschouris,¹ Spiridon Yiarmenitis,⁴ Dimitrios Mourikis,² Dimitrios Matsaidonis¹

¹ Department of Radiology, Tzanio General Hospital, Piraeus, Greece

² First Department of Radiology, University of Athens, Aretaieio Hospital, Athens, Greece

³ Department of Respiratory Medicine, General Military Hospital, Athens, Greece

⁴ Department of Radiology, University Hospital Heraklion, Crete, Greece

⁵ 137 El. Venizelou Av., 17123 Nea Smirni, Athens, Greece

Findings and limitations of focused ultrasound as a possible screening test in stable adult patients with blunt abdominal trauma: a Greek study

ABSTRACT: Our objective is to underline the place of FAST (focus assessment by sonography for trauma) ultrasonography (US) in the investigation of blunt abdominal trauma. We retrospectively examined the ultrasound findings in 1,999 haemodynamically stable adult patients. These people were admitted to the emergency room (ER) for possible blunt abdominal

trauma. All were stable at admission and a FAST ultrasound examination was made. Initial findings were compared with the clinical course after at least 24h of observation time and CT results. Among the 1,999 US examinations, abnormalities were found in 109 (5.5%) cases. Among them, 102 had free peritoneal fluid, and in 58 examinations, ruptures, lacerations or

haematomas were demonstrated. Despite its limitations, such as in cases involving uncooperative patients, excessive bowel gas, obesity and empty bladder, the FAST technique seems to be an accurate method to evaluate the possibility of abdominal blunt trauma in stable patients. Because of the high negative predictive

value of the FAST technique in stable patients with blunt abdominal trauma, we recommend that a stable patient with negative ultrasound results at admission remain under close observation for at least 12 or preferably 24h before being discharged.

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John A. Spencer,¹ Rosmarie Forstner,² Teresa M. Cunha,³ Karen Kinkel,⁴ and on behalf of the ESUR Female Imaging Sub-Committee

¹ Department of Radiology, St. James's University Hospital, Beckett Street, Leeds, LS9 7TF, UK

² Universitätsinstitut für Radiagnostik, Müllner Hauptstr. 48, A-5020 Salzburg, Austria

³ Department of Radiology, Hospital Pulido Valente, Lisbon, Portugal

⁴ Clinique des Grangettes, Geneva University Hospital and Institut de Radiologie, 7, Chemin des Grangettes, CH1224 Chêne-Bougeries/Geneva, Switzerland

ESUR guidelines for MR imaging of the sonographically indeterminate adnexal mass: an algorithmic approach

ABSTRACT: A significant proportion of adnexal masses detected by sonography are indeterminate. Either their organ of origin is uncertain or it is unclear whether their nature is benign or malignant. MR imaging of the sonographically indeterminate adnexal mass can resolve most of these uncertainties. Most indeterminate masses result from common benign conditions and women with such masses can avoid unnecessary or inappropriate surgery. For the minority of women whose masses are malignant, use of MR imaging

rather than a 'wait and watch' strategy of repeat ultrasound (US) results in a more timely diagnosis. There are simple diagnostic steps in the MR imaging assessment which direct an algorithmic and problem-solving approach based on signal characteristics and morphology. MR imaging should provide a more timely diagnosis and, thereby, guide the management of the patient with reduced costs of investigation and treatment.