Lung rockets &pulmonary functions

Summary:

Abstract: The ultrasound (US) of the chest is useful in the diagnosis of different parenchymal, pleural and chest wall diseases**.**

The ultrasound is preferred because no radiation is used (safe during pregnancy), not expensive, easy portability, real time imaging and the ability to make a dynamic imaging.

Aim:

This study aimed for the correlation between B-lines and spirometry, arterial blood gases (ABG) , 6-minute walk test (6MWT) and pulmonary artery systolic pressure (PASP).

Design: A prospective study.

Setting: Fayoum university hospital in Egypt between January 2017 and June 2017.

Subjects and methods:

This study was done on 60 patients with DPLD.They were undergone to a full medical history,a detailed clinical examination,high resolution computed tomography (HRCT), echocardiography, arterial blood gases analysis, Spirometry, 6M WT and chest ultrasound.

Results:

The studied group showed female predominance 54 patients (90%) with wide range of age 20 to 75 years and its mean was (47.5 ± 13.6) years.

Most of them were breeding birds, exposed to biomass and nonsmokers. The studied patients had bilateral B-lines. The number of B-lines was positively correlated with PaO2 , 6MWT , forced vital capacity (FVC) and PASP while the distance between B-lines was inversely correlated with each of PaO2 , numbers of B-line , 6MWT ,FVC and PASP.

Most of patients had irregular and thickened pleura (71.6%) and abolished lung sliding in (51.6%).

Conclusion:

Chest ultrasound may be used in evaluation of diffuse parenchymal lung disease (DPLD). Multiple B-lines with thickened and irregular pleural line are suggestive of DPLD.

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