

PULMONARY EMBOLISM PROCEDURE VALIDATION OF ECHOGRAPHY IN PE BY EMERGENCY PHYSICIANS.



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Mancho Cebrián, Guillermo. Camacho Leis, Carmen. Cossio Cavanilles, Gerardo. Gomez Granizo, M^a Elena. Corral Torres, Ervigio.

TOPIC

Following the attention of a case of PE in our SEM, the need arises to elaborate and implement a specific and novel procedure in emergencies (PE Procedure -September 2018). The incorporation of ultrasound in emergencies allows the diagnosis of mass PE as shown in published literature.

AIM: To examine whether this procedure, which includes in situ ultrasound by emergency physicians, can detect cases of mass PE in which early treatment must be performed in the extrahospital environment.

METHODS

Retrospective analytics of patients diagnosed as PE by SEM September 2018 - January 2, 2019. Collection of data from medical records and hospital monitoring record. Scope: Extrahospital care in Madrid. Data processing and analysis: Quantitative variables are described by central and dispersion measures, and qualitative by frequency distribution. Validity: Sensitivity and Specificity. Security: Predictive Values. Excel Access and SPSS V20.

RESULTS

Includes 13 cases, one of which is eliminated for failure to meet inclusion criteria. The median age is 60,50 years (IQR 11,5), 58,3 % are males, with median FC 130 (IQR 18,50), SatO₂ 88 % (IQR 11), pCO₂ 39 (IQR 17,5) and pH 7,34 (IQR 0,3). Hospital diagnosis in 7 patients was massive PE and in all of them extrahospital ultrasound was performed. Ultrasound sensitivity was 66%, 100% specificity, 100% VPP, 100% VPN, and 66% VPN.

CONCLUSION

- Despite the few cases included by the recent implementation of the procedure it can be considered that the ultrasound in the diagnosis of PE in our patients is able to detect all healthy individuals and correctly diagnose 66% of patients.
- Positive ultrasound ensures that patients are 100% likely to have massive PE.
- The ultrasound performed by emergency physicians allows the early diagnosis and treatment of this serious pathology. There is a learning curve for the correct inclusion of patients.