## APPENDIX 1 ultrasound Images



Image (1)27years old female with bilateral mild pleural effusion due to chronic renal failure


Image (2) 55 years old male with right moderate pleural effusion and left mild pleural effusion due to congestive heart failure


Image (3) 82 years old male with left mild pleural effusion due to acute renal
failure


Image( 4)45 years old female with left mild pleural effusion and right moderate pleural effusion due to congestive heart failure


Image (5)72 years old male with bilateral mild pleural effusion due to tuberclosis


Image (6) 24years old male with right moderate pleural effusion due to stab


Image (7) 24 years old female with bilateral moderate pleural effusiondue to pneumonia


Image (8) 43 years old male with bilateral mild pleural effusion due to congestive heart failure and tuberclosis


Image (9) 25 years old male with mild pleural effusion due to ca lung


Image(10) 74 years old male with moderate pleural effusion due to chronic renal failure

Appendix 2

## Sudan University of Sciences and Technology <br> Evaluation Of Pleural Effusion in Omdurman Teaching Hospital using Ultrasound Data Collection Sheet

Gender :- Female( ) Male( )
Age: $\qquad$ .Height: .W eight: $\qquad$
Region:
Khartoum () Omdurman () Khartoum north()
Occupation : $\qquad$
Patient 's education :
Illiterate ( ) Primary school( ) Secondary school( )University ( )
Clinical Presentation :
Fever ( ) Cough ( ) Chest pain( ) Dizziness ( ) Short of breathing ( ) family History :Yes ( ) No ( )

## Causes:

Abdominal( ) Pulmonary( ) Cardiac( ) others( )
Ultrasound Finding:
Mild () Moderate ( ) Massive ( )
Associated ultrasound finding :
Organomegly ( ) Metastasis( ) Ascites( ) Others( )

