

Group A, 50 patients age 40—75 years are complaining of cough, exertional dyspnoea, scanty sputum and have history of smoking for at least 30 years.

Group B, 50 patients who are non smoker considered as control

Full history, including drug history and clinical examination was done for both groups. Also investigations were done for both groups include.

- 1- Chest X rays
- 2- Pulmonary function test
- 3- Electrocardiography
- 4- Serum electrolyte such as serum potassium.
- 5- Haematological investigation such as

measurement of PCV.

6- echocardiographical Study

7- Holter monitoring for 24 hours

Patients who receive bronchodilator and diuretic are included in this study while those who are compiling ischemic heart disease and who receive digoxin or other anti-arrhythmia are excluded from this study.

Result

The result of clinical characteristic and laboratory investigation, pulmonary function test, standard ECG and 24 hour holter monitor were compared between group A (COPD) and the control group are shown in (Table 1 , 2 , 3, and 4) respectively.

Table 1: Characteristic of patients

characteristic	Group A	Group B
age	55±15	55±15
male	80%	80%
female	20%	20%
smoking	98%	0%
PCV	40%-55%	35%--45%
Serum K. $\mu\text{mol/L}$	3.4—4.7	3.4---5.0
Presence of oedema	20%	0%
History of admission	47%	4%
Pulmonary hypertension by echo.	50%	0%

Table 2: Characteristic of pulmonary function test

Pulmonary function test	Group A	Group B
FEV ₁	0.5—2.8	2.6--3.5 L
FVC	0.9—3 L	2.7 L—3.9 L
FEV ₁ /FVC	33%--68%	90±10%
PEFR	1.4 -5.2 L/S	4---6 L/S
R. volume	2 L—6 L	1—2 L
T.L.capacity	5.2 L—9.8 L	5 L—7 L
Increase R.V.	0.5 L—5.1 L	
Increase T.L.C.	1.3 L—4 L	

FEV=forced expiratory volume, FVC=forced vital capacity, R=Residual, T.L.C=total lung capacity, R.V=residual volume