

coronary heart disease and it is of high frequency when compared to the normal people<sup>(11,12)</sup>.

These study shows, the people with cor-pulmonal manifested by low FEV<sub>1</sub> and low FVC, high residual volume and high total lung capacity and echocardiography finding have high incidence of arrhythmia than control group (B) p. value 0.007.

Thomas and valabhji detect arrhythmia by standard electrocardiogram in 7% of patients with chronic obstructive lung disease<sup>(12)</sup>.

Corzza and pastor examined the frequency of arrhythmia in patients with chronic obstructive lung disease during standard electrocardiograph are 31% of them had arrhythmia<sup>(13)</sup>. That compatible with our study which shows frequency of arrhythmias during standard electrocardiography are 24% of patients with chronic obstructive lung disease.

The arrhythmias detected in patients with chronic obstructive pulmonary by 24 hour holter monitoring more frequency than arrhythmias by standard electrocardiography.

Ventricular ectopic, Atrial ectopic, sinus tachycardia, Atrial fibrillation and Supraventricular tachycardia high frequency in patients with chronic obstructive pulmonary disease than other control group as mention in (Table 4).

The mechanism of arrhythmia in chronic pulmonary disease is not known but is probably diverse and multi factorial including hypoxemia, acidosis, bronchodilator therapy and electrolyte imbalance<sup>(14)</sup>.

### **Conclusion**

patients with sever obstructive pulmonary disease have more risky for arrhythmias than other people and most of arrhythmias detected by 24 hours

holter monitoring rather than 12 lead ECG. Patients with cor-pulmonal have more risk for arrhythmias. the arrhythmia in COPD include atrial ectopic 72%, ventricular ectopic 64%, atrial fibrillation 24%, atrial flutter 12%, heart block 12%, Supraventricular tachycardia 10%, and W.P.D(Wolff Parkinson white syndrome)2%.

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