

# Abstract

## **Background:**

Electrocardiographic changes are well known to appear with acute cerebrovascular events.

## **Objectives:**

To determine if QT dispersion (QTD) is increased in patients with acute stroke and if this could be related to changes in neurologic function.

## **Methods:**

Our study conducted on 40 adult patients of both sexes ( mean age  $62 \pm 9$  years old, 42.5% male) diagnosed as acute cerebrovascular stroke after doing CT brain. QTD was calculated from admission electrocardiogram .Modified Rankin Scale was used to assess functional status after 3 months.

## **Results:**

Patients with intracerebral haemorrhage showed higher QTD compared to ischaemic patients ( $67 \pm 16$  msec vs  $52 \pm 26$  msec ,P value; 0.04). Patients with prolonged QTD showed lower score on Glasgow coma scale ( $11.36 \pm 3.78$  vs  $14.53 \pm 1.06$ ,P value; 0.003). as well as lower functional outcome assessed by modified Rankin scale ( $4.64 \pm 1.41$  vs  $2.13 \pm 0.99$ ,p value ; 0.001). compared to these with normal QTD.

**Conclusion:**

QTD may be used as a predictor of functional outcome and mortality following acute neurological events.

**Key words:**

stroke, QT dispersion.