Abstract

We aimed to establish a mice model of impaired glucose tolerance in our laboratory and investigate the effect of Ecballium elaterium extract on our mice model.We investigate the effect of Ecballium elaterium extract on mice, after 5 days of IP injection of Ecballium elaterium extract. Fasting, 30, and 60 min IPGTT show that Ecballium elaterium treated mice have lower glucose level than normal saline treated mice. After the treatment of Ecballium elaterium for 5 days, we discontinue the treatment and after 25 days Ecballium elaterium treated mice show a lower fasting blood glucose. In addition, mice drink 30% sucrose for one month has a significant increase in their weight in percentage to their 5^{th} day weight, compared to mice drink tap water. Sucrose treatment has no effect on fasting blood glucose and IPGTT.Conclusion, one month of 30% sucrose drink is not enough to induce a model of impaired glucose tolerance but has a significant effect on mice weight, the Ecballium elaterium extract has a significant reductive effect on FBG and IPGTT in mice treated for 5 days and the effect continue to be present on FBG after 25 days of discontinued treatment.