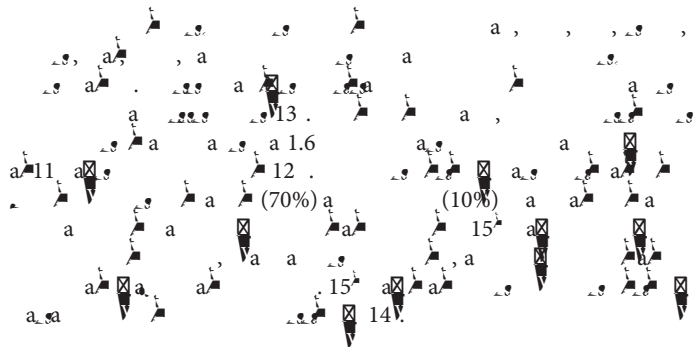


**Key Words:** *Cardiac hypertrophy, myocardial infarction, oxidative stress, apoptosis*

**Introduction**

Cardiac hypertrophy is a common pathological response to increased pressure or volume load. It is characterized by an increase in the size of the heart muscle cells, which leads to an increase in the size of the heart. This process is regulated by a complex signaling pathway involving various growth factors and signaling molecules. In the present study, we investigated the role of oxidative stress and apoptosis in the development of cardiac hypertrophy. We found that oxidative stress plays a key role in the development of cardiac hypertrophy, and that apoptosis is also involved in this process. Our findings suggest that targeting oxidative stress and apoptosis may be a potential therapeutic strategy for the treatment of cardiac hypertrophy.

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### Material and Methods

In this study, 23 (n=13) acute ethanol and (n=10) chronic ethanol chicks (10-26 days old) were used. The control group consisted of 11 chicks (n=11) and the ethanol group consisted of 12 chicks (n=12). The acute ethanol group consisted of 15 chicks (70%) and the chronic ethanol group consisted of 10 chicks (10%).



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