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شبكة المعلومات الجامعية التوثيق الالكتروني والميكروفيلم



جامعة عين شمس

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بالرسالة صفحات لم ترد بالأصل



HISTOLOGICAL STUDY ON THE EFFECT OF AMIODARONE (CORDARON) ON THE LUNG AND THE LIVER OF ALBINO RAT

رسالة

Thesis

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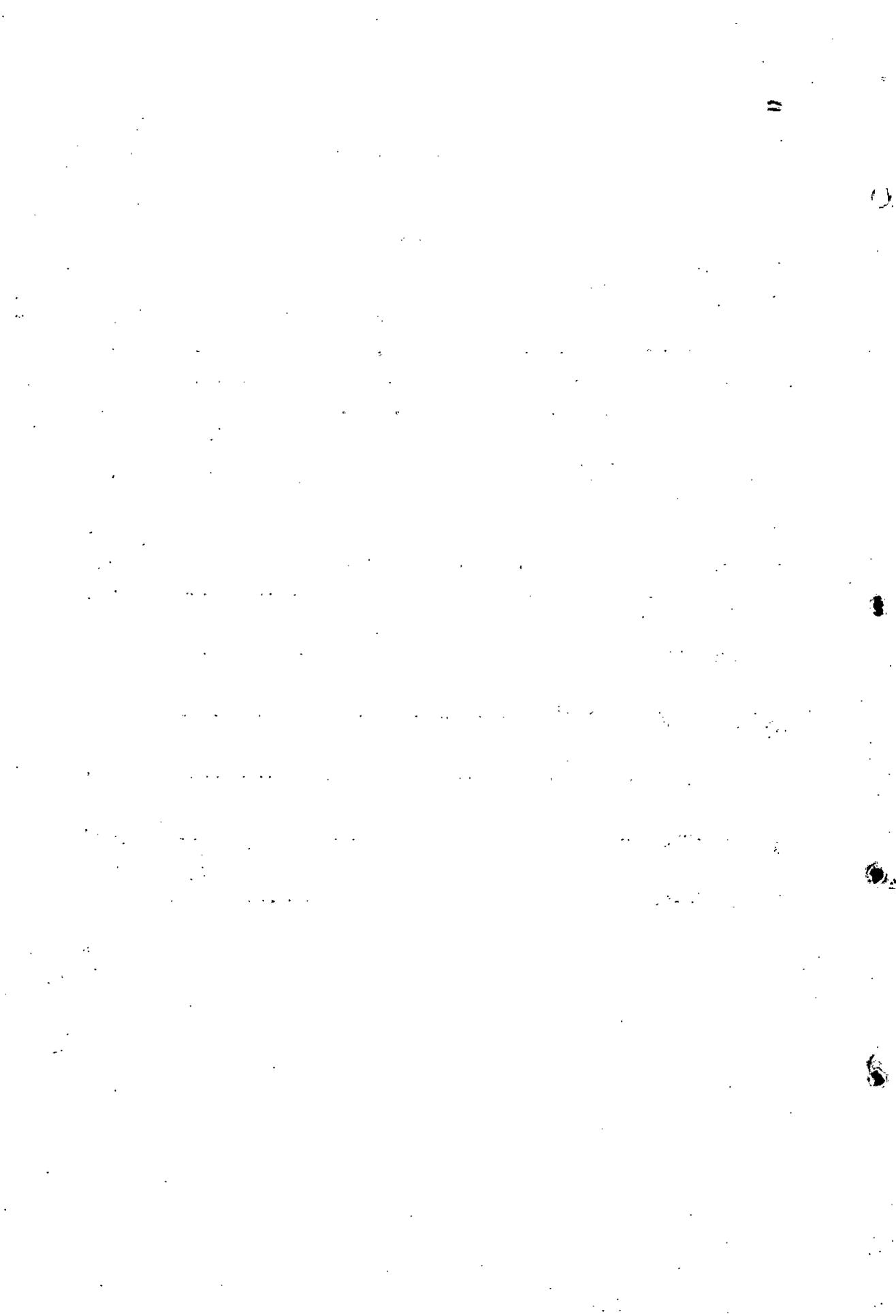
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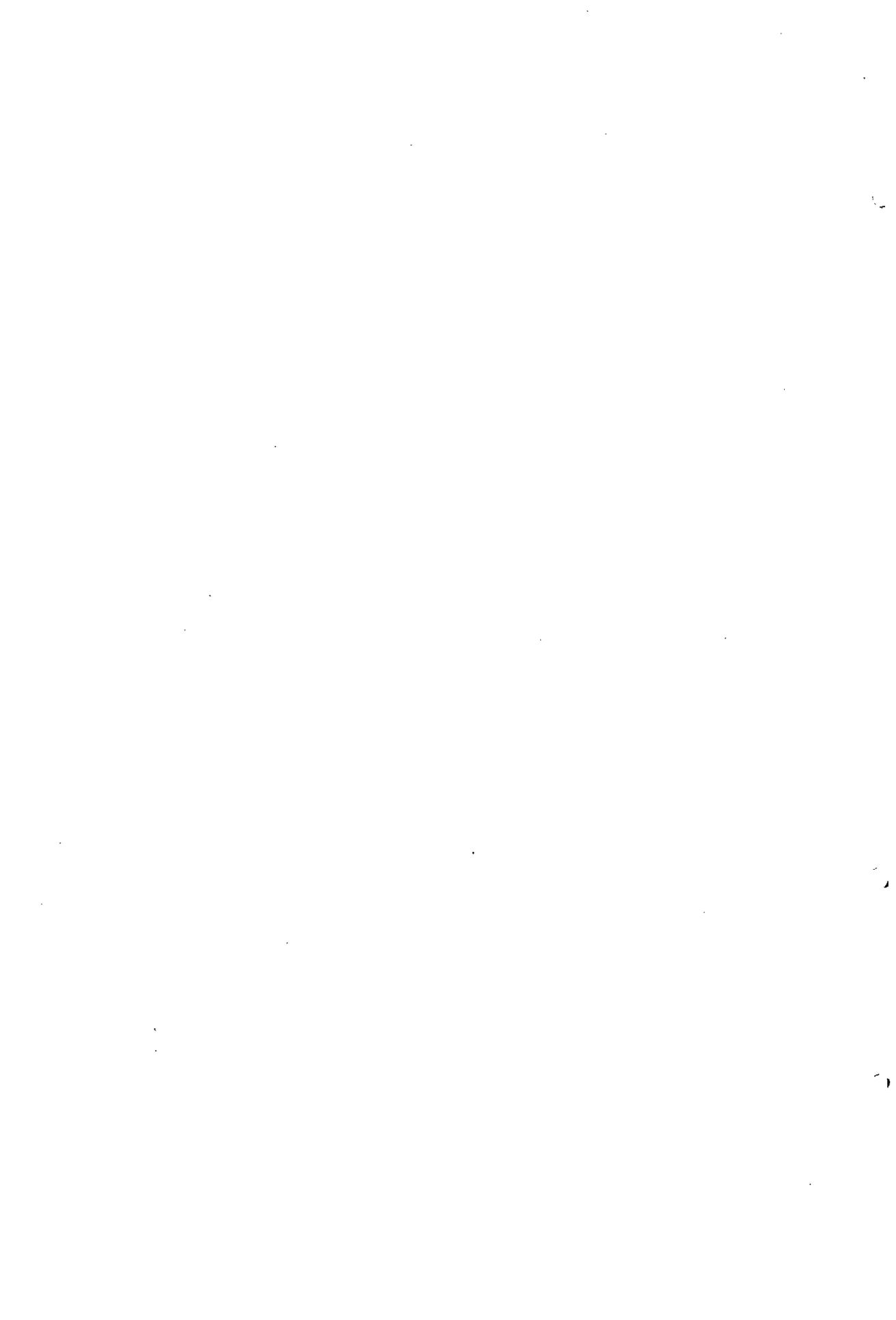


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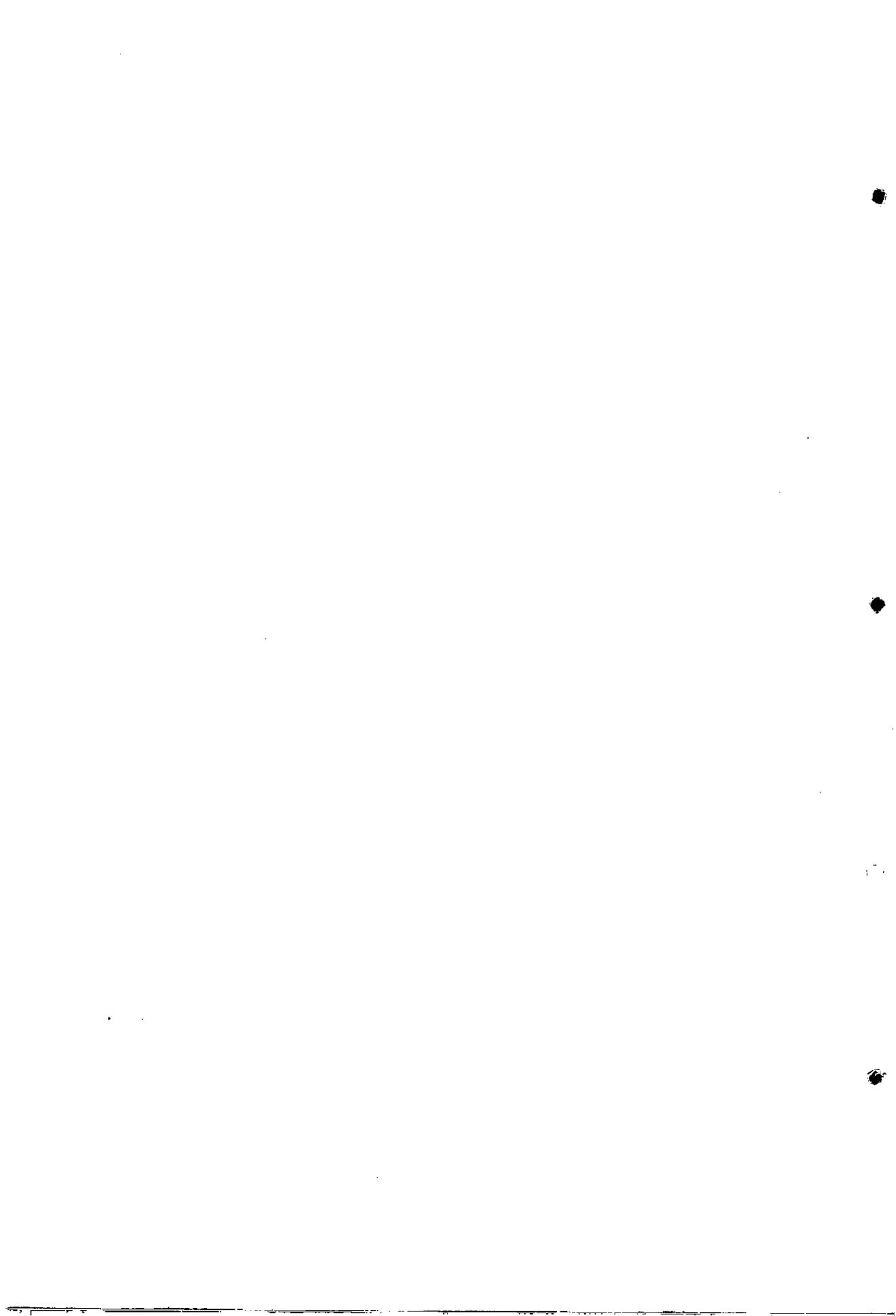
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INTRODUCTION

Cardiac arrhythmias are complex and fatal conditions that necessitate the use of anti-arrhythmic drugs for saving patient's life (*Laurence and Bennett, 1992*).

Amiodarone is a widely used anti-arrhythmic drug. Although it is usually used in different types of cardiac arrhythmias, many side effects such as thyroid dysfunction and skin discoloration are reported. The most serious side effects are lung damage and impairment of liver function (*Gillian and Harry, 1997*).

Chendrasckhar et al., (1996) stated that patients using amiodarone might develop pulmonary toxicity with an estimated fatality ranging from 1% up to 33%.

Poucell et al., (1984) reported cases of disturbed liver function and liver enlargement in patients treated with amiodarone. Moreover, *Padmavathy et al., (1992)* mentioned that administration of amiodarone might lead to liver damage with increased activity of liver enzymes, alanine aminotransferase and aspartate aminotransferase.

On the other hand, *Daniels et al., (1990)* did not observe any sign of pulmonary damage or hepatotoxicity after administration of the drug. Moreover, *Wilson et al., (1991)*

Introduction & Aim of the work

studied the effect of amiodarone on the lung and found no histological changes.

There has been increasing interest in the possibility that the toxic products of oxidative reactions may play a role in tissue damage caused by amiodarone. It has been suggested by *Bennett et al., (1987)* that the keto oxygen of amiodarone is a focus for free radical formation.

Mechanisms of damage caused by amiodarone including generation of free radicals were studied by *Reasor and Kacew (1996)*. They assumed that antioxidants might have a protective role against amiodarone toxicity.

On the other hand, *Wilson and Lippmann (1993)* suggested an immune mediated mechanism for damage caused by amiodarone. The controversy of results concerning the effect of amiodarone on liver and lung, suggested the need for more studies about the drug effect on these organs.

AIM OF THE WORK

The aim of this study is to elucidate the effect of amiodarone on the liver and lung and the protective role of α -tocopherol as a natural antioxidant with drug administration.

