

شبكة المعلومات الجامعية







شبكة المعلومات الجامعية التوثيق الالكتروني والميكروفيلم



شبكة المعلومات الجامعية

## جامعة عين شمس

التوثيق الالكتروني والميكروفيلم

### قسم

نقسم بالله العظيم أن المادة التي تم توثيقها وتسجيلها على هذه الأفلام قد أعدت دون أية تغيرات



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# COMPARATIVE STUDY BETWEEN THE EFFECTS OF CARVEDILOL AND METOPROLOL ON DOXORUBICIN INDUCED NEPHROPATHY

B6950

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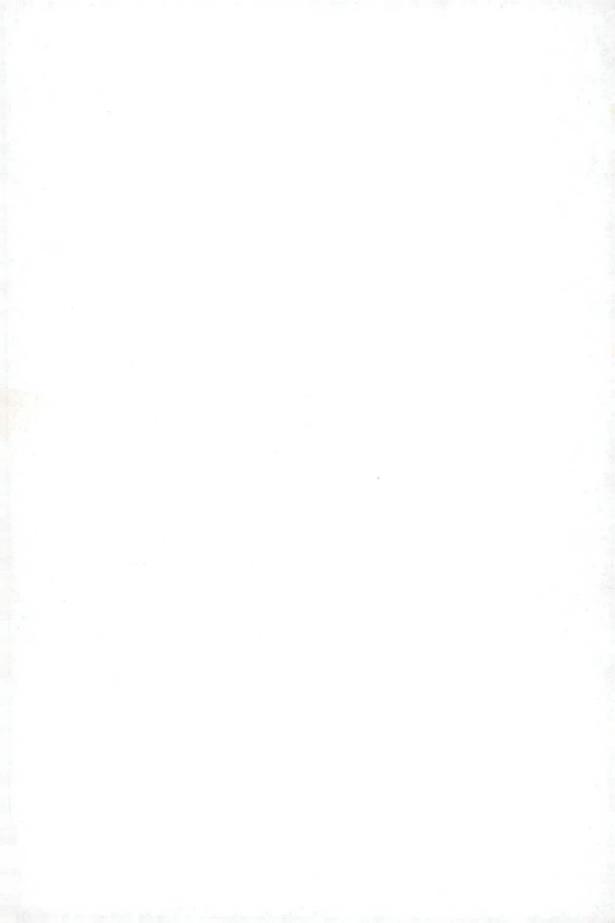
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#### <u>ACKNOWLEDGEMENT</u>

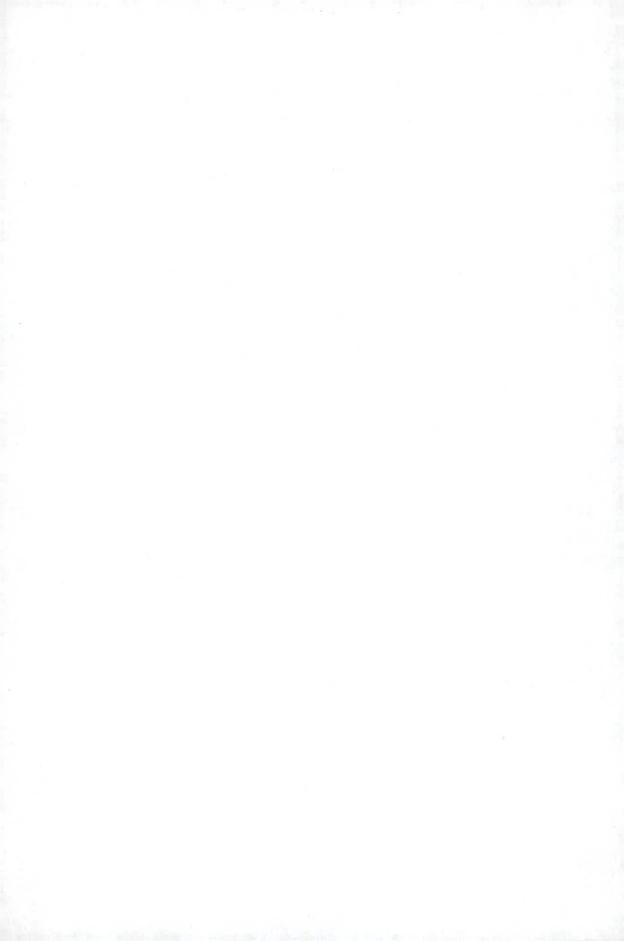
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#### **ABSTRACT**

The present study was designed to compare the effects of carvedilol and metoprolol on renal function and to detect any protective effect offered by these drugs against renal impairment. The present work showed that carvedilol did not affect the normal renal functions and produced only mild pathological changes in the normal kidneys of rats. Meanwhile, metoprolol produced sodium retention, hypoalbuminemia and moderate histopathological changes in the normal kidneys of rats during the period of the study. The model of renal impairment used was doxorubicin - induced nephropathy. Metoprolol administration one week before and four weeks after induction of nephropathy did not alter the high levels of the different serum biochemical parameters observed within the model. On the other hand, carvedilol administration one week before and four weeks after induction of nephropathy produced a significant improvement on the different serum biochemical parameters. It restored the serum levels of sodium, potassium, creatinine, urea and albumin to normal levels. Moreover, it decreased both serum triglycerides and cholesterol. The biochemical and histopathological results of the two tested drugs on doxorubicin induced nephropathy reflected a possible renal sparing and nephroprotective effect for carvedilol compared to metoprolol.

#### Keywords:

Carvedilol, Metoprolol, Doxorubicin – induced nephropathy, Renal function, β-Blockers and lipids, β-Blockers and serum electrolytes, Nephroprotection.

