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ثبكة المعلومات الجامعية





# جامعة عين شمس

التوثيق الالكتروني والميكروفيلم



نقسم بللله العظيم أن المادة التي تم توثيقها وتسجيلها علي هذه الأفلام قد اعدت دون آية تغيرات



يجب أن

تحفظ هذه الأفلام بعيداً عن الغبار

في درجة حرارة من 15-20 مئوية ورطوبة نسبية من 20-40 %

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# BONE MARKERS IN POSTMENOPAUSAL WOMEN

WITH OSTEOPOROSIS

Essay
Submitted for partial fulfillment of
M. Sc. degree in clinical & chemical pathology

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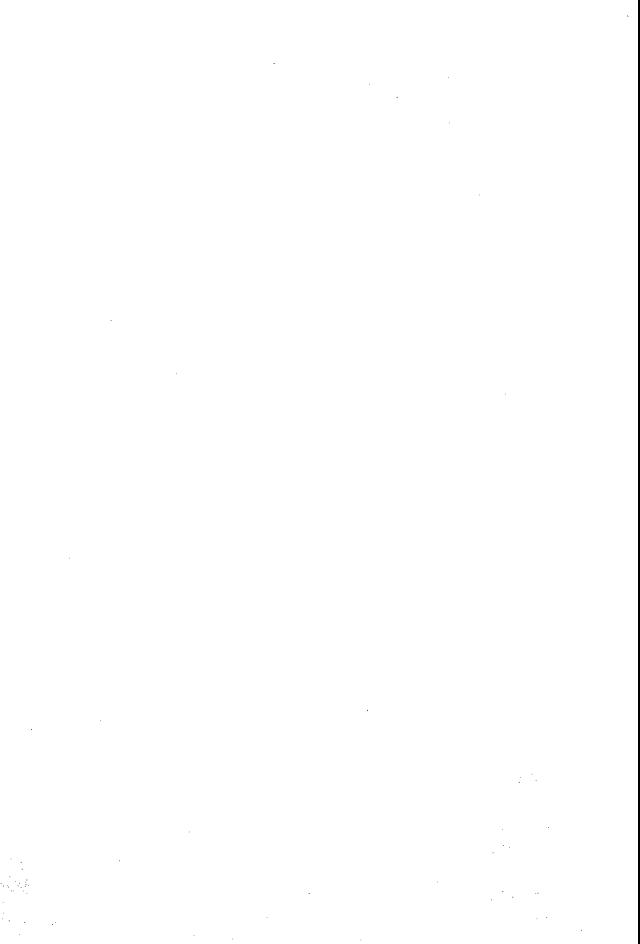
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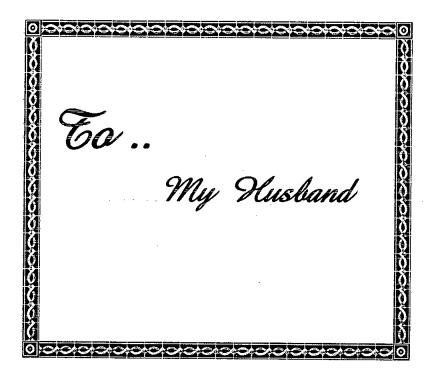
## **ABSTRACT**

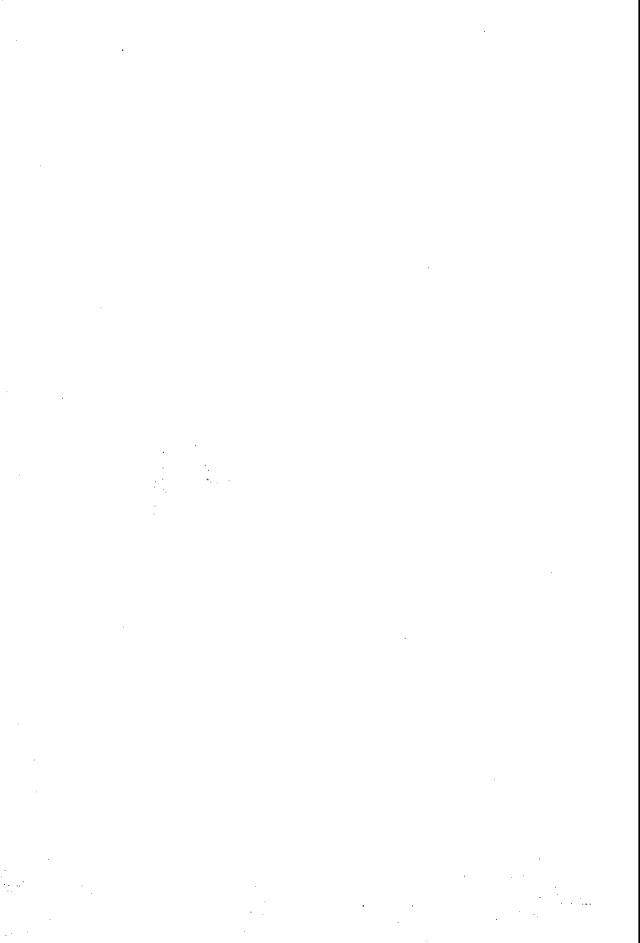
Menopause is that point in time when permanent cessation of menstruation occurs following the loss of ovarian activity. Osteoporosis is a condition of low bone mass associated with microarchitectural deterioration of bone tissue leading to enhanced bone fragitity and consequent increase in fracture risk, with the bone tissue itself having a normal biochemical make-up. Oestrogen normally acts as a block to 2<sup>nd</sup> messenger from the osteoblast to the osteoclast when the former is stimulated by the parathormone. Biochemical markers of bone turn over play an important rote as the tool of estimation of bone metabolism rate. There is an inverse relationship between bone mass and the biochemical markers.

## Key Words:

Biochemical markers- Oesteoporosis- Postmenopause-







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