

## **Dedication**

***To***

***My Father and my Mother***

Beacon light to me through science, is still shining.

***My wife***

My Science ship docked on your beach ... and sailing again for a new science, and then docked ... on your beach.

***My Country***

Travel and you are in the trappings of splendor.

***My Arabic and Islamic Nation***

Dedicate to all of you the fruit of this modest effort.

## **Acknowledgement**

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## **Abstract**



Hypertension or high blood pressure (BP) affects a large proportion of the world's population. It is a major risk factor for heart attacks, brain strokes and kidney failure, resulting in a heavy health and economic burden on patients, families and health authorities.

The objective of this study is to see the effects of Continuous Positive Airway Pressure (CPAP) on Blood Pressure (BP) in patients with Obstructive Sleep Apnea (OSA) .

This research was done in Omdurman Military Hospital, Sleep Laboratory on the number of thirty patients. These patients were found to be suffering from Obstructive Sleep Apnea (OSA). All patients had high blood pressure. In the Laboratory the patients were treated using Continuous Positive Airway Pressure (CPAP) machine to see the effect of CPAP on blood pressure .

Blood pressure was measured before and after treatment directly and there was a significant improvement in results after treatment.

## □□□□□□□□

ان ارتفاع ضغط الدم يصيب نسبة كبيرة من سكان العالم وهو عامل خطير للسكتة القلبية والسكتة الدماغية والفشل الكلوي مما ينتج عنه أعباء صحية و اقتصادية ثقيلة على المرضى و الاسر والهيئات الصحية

ان الهدف من هذه الدراسة هو دراسة تأثير ضغط الهواء الايجابي المستمر علي ضغط الدم في المرضى المصابين بمتلازمة انقطاع التنفس أثناء النوم

لقد تم هذا البحث في مستشفى السلاح الطبي بامدرمان في معمل النوم علي عدد ثلاثين مريضا وجد أنهم يعانون من متلازمة انقطاع التنفس أثناء النوم و كل هؤلاء المرضى يعانون من ارتفاع ضغط الدم

لقد تم علاج هؤلاء المرضى باستخدام جهاز ضغط الهواء الايجابي المستمر في معمل النوم لرؤية تاثير الجهاز علي ارتفاع ضغط الدم و قد تم قياس ضغط الدم قبل و بعد العلاج مباشرة و كان هناك تحسن كبير بعد العلاج