

CASE REPORT

Monitoring the Blood Pressure of the Patients During Normal Station Hospital Stay

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Conflict-of-interest statement: The intellectual properties included in this manuscript belong solely to the author. No funding or financial relationship is associated with the development of this work

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Received: May 21, 2017

Revised: July 14, 2017

Accepted: July 17, 2017

Published online: December 25, 2017

ABSTRACT

Significant variations of blood pressure are very important clinical events that can lead to serious cardiovascular events, such as stroke, myocardial ischemia, and heart failure. Accordingly, careful measurement of the blood pressure is very important for classifying the patients, estimation of the associated risks and guiding of the management. Twenty-four hours ambulatory monitoring of the blood pressure remains the method of choice for the diagnosis and risk prediction.

Key words: Blood pressure monitoring and normal station hospital stay

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Mohamed MSA. Monitoring the Blood Pressure of the Patients During Normal Station Hospital Stay. *Journal of Respiratory Research* 2017; 3(4): 129-130 Available from: URL: <http://www.ghrnet.org/index.php/jrr/article/view/2030>

INTRODUCTION

Significant variations of blood pressure are very important clinical events that can lead to serious cardiovascular events, such as stroke, myocardial ischemia, and heart failure. Accordingly, careful measurement of the blood pressure is very important for classifying the patients, estimation of the associated risks and guiding of the management. Twenty-four hours ambulatory monitoring of the blood pressure remains the method of choice for the diagnosis and risk prediction^[1].

MONITORING OF BLOOD PRESSURE DURING HOSPITAL STAY

While the continuous monitoring of blood pressure is applied during the intensive care unit stay, and the acute emergency station stay, the monitoring of the blood pressure during the normal station stay is usually performed through the frequent measurement by the nursing team. This is of great importance in cases with known hypertension/hypotension and or hypertensive crisis, especially if the patient can't feel the changes by herself/himself. With many number of patients in the station, this may create a stressful condition for the nursing team.

SUGGESTED SOLUTION

Limiting the blood pressure monitoring by the nursing team to the initial 2-3 days of the normal station hospital stay and the initial 2-3 days after the medical control of the blood pressure. For the continuous monitoring of the blood pressure during the normal station hospital stay, self-used blood pressure measuring devices could be available in the station and given to the patients of interest, where the patients could measure their blood pressure themselves at least three times a day (Figure 1), and record the measurements for the control by the doctor during the weekly visits, in addition to informing the

medical team at any time the blood pressure exceeds or decreases below the guideline limits.

The application of this approach might allow the careful monitor of the blood pressure of the patients during the normal station hospital stay, while minimizing the load on the nursing team, especially in situations, where few number of nursing personnel is available for relatively many number of patients. However, this approach should be limited to the long term monitor of the already under control blood pressure patients.

DISCUSSION

The application of this concept was opposed by the experience that the self-used wrist blood pressure measuring devices are not as



Figure 1 Self measurement of the blood pressure.

accurate as the traditionally used devices and measurement by the skilled personnel. However, the proposed approach recommends the measurement of blood pressure by the skilled personnel during the initial 2-3 days of the normal station stay, the initial 2-3 days following the medical control of the blood pressure, and the period following the administration of anti-hypertensive medications.

The self measurement of the blood pressure during the prolonged normal hospital stay could provide, at least, the ability of the rough, but continuous, assessment of the blood pressure, where the adjustment of the self-measurement and the skilled personnel-measurement could take place. This may provide the patient with a good sense of care, while controlling the blood pressure values during the weekly visits of the physicians. A special chart may be given to the patient to write down the blood pressure values and the time of the measurements, which could be collected weekly and included into the patient's file. While the proposed notion remains a suggested idea that may lighten the work load on the medical personnel, a clinical study may be required to assess its reliability.

REFERENCE

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