A retrospective review of the usage of 24-hour Ambulatory Blood Pressure Monitoring (ABPM) in Cheung Sha Wan Jockey Club (CSWJC) GOPC from 11/2016 to 10/2017

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Introduction
Hypertension (HT) is one of the most commonly seen medical problems in GOPC. However, episodic blood pressure (BP) measurements may vary owing to a large number of reasons. 24-hour ABPM is a useful tool for assessment and evaluation.

Objectives
To review all the 24-hour ABPM booked in CSWJC GOPC during 11/2016 – 10/2017. To summarize indications, results for 24-hour ABPM and subsequent management.

Methodology
Record appointments of 24-hour ABPM were retrieved from Shroff. Patients’ records were reviewed in Clinical Management System.

Result
Throughout the year 11/2016-10/2017, 85 24-hour ABPM were arranged by clinic doctors in CSWJC GOPC. 12 appointments were defaulted (14%). One 24-hour ABPM measurement in a dementic patient was unsuccessful with measurement rate 57% (Cutoff: 70%).
Amongst 36 appointments (42%) which were indicated to rule out white coat HT; 12 of them (33.3%) were confirmed to have genuine HT. 4 of them were put on lifestyle modification (LSM) alone and 8 were prescribed with medications. 11 of them (30%) were confirmed to have white coat HT and were managed conservatively. 6 of them (16%) known to be hypertensive were arranged with 24-hour ABPM as their elevations of BP in clinic were suspected to have white-coat component. 5 had normal 24-hour ABPM measurements and same medications were kept. 1 had suboptimal BP revealed in 24-hour ABPM with medications adjusted. 1 was found to have isolated nocturnal HT and was put on LSM.
29 appointments (34%) were made to rule out masked HT. 16 of them (55%) were
confirmed to have genuine HT; 4 were advised with LSM alone, 11 were started with medications, and 1 refused starting medications. 7 of the 29 (24%) patients were found to be normotensive. Reassurance was given.

20 appointments (23%) were indicated to see the BP control in known hypertensive patients. 5 of them had good BP control. 6 were suboptimal with medications were adjusted. 1 hypertensive patient was found to have poor BP control at nighttime and anti-hypertensive medication was started.

Conclusion:
Episodic BP measurements at clinic setting are often insufficient in diagnosing whether patients suffer from genuine HT or to evaluate patient’s BP control. 24-hour ABPM is a very helpful non-invasive investigation which can effectively help us in diagnosis and management in patients with elevated BP.