

Notes on Event Recorders.

Event recorders are **small portable battery-powered devices**, which **record the hearts rhythm** when activated by the patient, there are also some monitors, which can detect an abnormal rhythm, otherwise known as an arrhythmia, automatically and will start to record the electrocardiogram (ECG).

Event monitors are used **as a form of ambulatory monitoring** as the patient can still go about their daily routine and only when symptoms occur does the patient need to press the button on the device to start it recording their ECG from that point this is called a symptom event recorder, another type of event monitor is a loop memory monitor which stores the ECG before, after and during the point of being activated.

The principal use of event monitors is to **detect, document and characterise abnormal heart rhythms**, and this form of ambulatory ECG monitoring helps to determine the trigger, frequency, duration and location of the arrhythmia captured. It is especially useful when the patient only experiences their symptoms infrequently as it means the arrhythmia they are experiencing is paroxysmal and hard to capture on a normal resting ECG and since event recorders can be worn for up to a month they are more suited to the patient than a 24-hour Holter monitor would be since they are more likely to capture the abnormality.

The main advantages of event recorders are that they are **small and portable** so can be easily carried around without affecting the patient too much, they can monitor the ECG for longer periods of time and the data recorded can be sent almost instantaneously to the relevant people monitoring that patient which speeds up the diagnostic process and this means the patient does not have to bring the information into hospital, making their quality of life better and simpler.

Another benefit of using event monitors is that **they can capture the onset and offset of the arrhythmia**, which is usually the key to correctly diagnosing the patient and categorising the arrhythmia.

On the other hand these devices do have some limitations for instance, the patient activated event recorders **require the patient to be awake and conscious to activate the device** so they are not suitable for circumstances where patient is immobilised or prone to syncope and another is that the patient will have to continually wear the monitor for as long as it takes to capture an event and this could lead to skin irritation from the leads and