

FEAR FAINT

NOT, NOT



One of the most common reasons to be seen in my office is for a fainting or near fainting episode. Fainting can occur for a number of reasons. It can be neurological such as stroke or seizure. Other times it can be heart related such as electrical disturbances or heart valve problems. A third type of fainting is caused by too low blood pressure and sudden changes in posture. These forms can usually be sorted out from the initial history and examination especially if there was someone present to observe and describe what happened.

Electrical causes for fainting include both a slow heart rate for which a pacemaker may be needed, and a fast heart rate for which drugs, a defibrillator or a burning procedure called an ablation may be required. Monitoring the heart externally (24 hrs-2 weeks) or internally with an implantable device (3 years) will often capture the arrhythmia.

Valvular causes for fainting occur if a heart valve is too tight and cannot open sufficiently for blood to flow to the head. This is usually identified by a murmur on examination and further confirmed by an ultrasound of the heart called an echocardiogram. Treatment is usually surgical.

Low blood pressure as a cause can be identified by checking the blood pressure and heart rate while lying down and then again after getting up to a standing position suddenly. Wearing compression stockings or adjusting medications that lower heart rate or blood pressure often resolve this form of fainting.

The final form of fainting is also the most common and it is called a vasovagal attack or neurocardiogenic syncope. This occurs more often in young individuals. Over excitement, fear, sight of blood, excessive heat, nausea, coughing or sometime even voiding can be triggers. Dehydration will aggravate the situation. Usually there are warning

signs – feeling sweaty, flushed and weak while looking pale and unfocussed. Sitting down is essential, a cool cloth, fresh air and fluids will all help abort the episode. If one does faint, they usually awaken promptly with minimal confusion.

The mechanism for this type of fainting involves reflexes between the heart and brain. When one of the above triggers makes the heart rate go up, it in turn makes the walls of the heart touch each other. Through special nerves called mechanoreceptors the heart sends a message to the brain which then responds back with vagal nerve impulses that suddenly slows down the heart rate and drop blood pressure. This abrupt change causes the body to faint. This reflex can be reproduced by a test called a tilt table. Avoiding the triggers and improving daily hydration are the keys to prevention. Occasionally anti anxiety meds or beta blockers can be used but relaxation exercises are safer alternative. In rare circumstances when this type of fainting leads to injury a pacemaker is required. I hope that this knowledge can reduce fear which in turn can reduce faints!

By: Narendra Singh, MD



Narendra Singh MD FRCPC FACC FAHA, is a Clinical Assistant Professor, Georgia Regents University in Augusta, and the Director-Clinical Research, Atlanta Heart Specialists, LLC. Dr. Singh studied at the Dalhousie Medical School in Halifax, Nova Scotia and went on to complete a residency and cardiology fellowship at the University of Toronto. He may be reached at 678-679-6800.