

A white ECG line is plotted on a blue background with a dotted grid. The line shows a normal P wave, a very tall and narrow QRS complex, and a T wave. A red heart icon is positioned to the right of the T wave, with a white dot at its center connected to the ECG line.

What is an
arrhythmia?

THE HARLEY STREET CLINIC

What is an arrhythmia?

Arrhythmia is an umbrella term used to describe a number of conditions where the muscle contraction of the heart is too slow, too fast or irregular because of a disturbance with the heart's normal electrical activity.^{1,2}

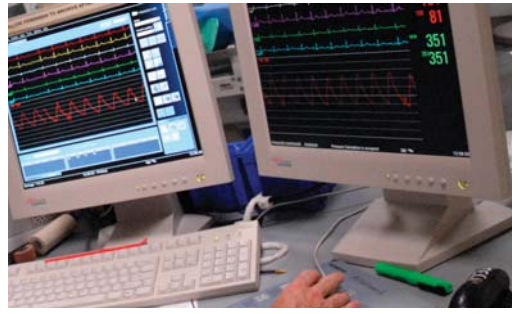
What are the different types of arrhythmia?

- ♥ **Atrial fibrillation** is the most common abnormal heart rhythm involving rapid and irregular activity in the heart. Although it may affect young people atrial fibrillation becomes more common with increasing age and typically affects older patients of 65 and over¹
- ♥ **Ventricular tachycardia** is a fast rhythm that starts in the bottom chambers of the heart (the ventricles) and leads the heart to beat so rapidly that it cannot fill or pump enough blood. It is commonly seen in patients who have suffered a previous heart attack and in this setting may be life-threatening¹
- ♥ **Atrial flutter** involves the top chambers of the heart (the atria) beating very rapidly and is commonly seen in middle aged and elderly patients¹
- ♥ **Atrial tachycardia** is a fairly uncommon arrhythmia but results in the heart beating far more rapidly than normal³
- ♥ **Ectopic beats** are heart beats which occur earlier than normal within the normal heart cycle. They are the most common disturbance of heart rhythm and can sometimes cause palpitations described as missed or extra beats⁴

What are the causes?

Arrhythmias can be caused by an underlying condition such as heart disease, thyroid conditions or high blood pressure. Certain factors such as stress, smoking, excess alcohol, anger, caffeine and certain drugs can also trigger arrhythmias. Sometimes however, there is no known cause.⁵





Anyone can be affected by an arrhythmia

Anyone can be affected by arrhythmia at any age. An estimated 700,000 people in the UK have an arrhythmia.²

What are the symptoms?

Symptoms of arrhythmias can include palpitations, shortness of breath, dizziness or faintness. They can range in severity from a minor inconvenience to a potentially fatal problem.⁶

How are arrhythmias diagnosed?

- ♥ There are several tests used to diagnose arrhythmias and the test used depends on both the type and severity of the symptoms
- ♥ A 24-hour electrocardiogram is usually done first as it monitors the heart rhythm over a 24 hour period and allows doctors to analyse the electrical activity in the heart to determine the type of arrhythmia⁷
- ♥ An ultrasound scan of the heart, called an echocardiogram, is often performed to check how the main pumping chamber is working and to look at the heart valves⁸
- ♥ In some instances, additional tests are carried out to determine which part of the heart is responsible for the abnormal rhythm⁸

What type of doctor treats arrhythmias?

Doctors with expertise in diagnosing and treating arrhythmias are cardiologists specialising in electrophysiology. They are highly skilled in diagnosing and assessing the best treatment for patients with an arrhythmia.¹

For more information on any of the above visit
www.theharleystreetclinic.com

The Harley Street Clinic

The Harley Street Clinic in the West End of London is a world class medical centre, home to leading heart consultants and specialist nurses equipped to deliver top quality care for their patients.

The Faculty of Consultants includes people with ground-breaking medical achievements. The Faculty of Nursing is established to recognise patient care and management as a major front line activity, with expectations of expertise and professionalism equivalent to the highest level of any medical services.

The cardiac unit at The Harley Street Clinic has the most advanced services, state-of-the-art facilities and equipment to treat any cardiac condition including arrhythmias.

The Harley Street Clinic is an accredited Centre of Excellence and has been named by the Healthcare Commission as one of London's top heart surgery centres.

Facilities

The cardiac unit has 15 private rooms and 5 beds in an open coronary care unit.

High level technology monitoring occurs throughout the cardiac unit. There is a continuous high ratio (per patient) of doctors and nurses with Advanced Life Support Training.

Treatments

Cardiac treatment is carried out by direct surgical intervention and, increasingly, by catheterisation.

Treatments for arrhythmias include:

- ♥ Catheterisation for arrhythmias including atrial fibrillation and supraventricular tachycardia
- ♥ Pacemakers for slow heart beats
- ♥ Implantable Defibrillators
- ♥ Electrophysiology



Infection Control

At The Harley Street Clinic, minimising the risk of healthcare associated infection – including MRSA and C.Difficile for each patient is a matter of continuous vigilance, robust infection surveillance systems and ongoing training of staff at all levels in hospital hygiene.

Our entire infection control procedure is supervised and reinforced by our experienced and dedicated Infection Control Nurses and Consultant Medical Advisers. This commitment to the highest quality standard has successfully kept the incidence of MRSA infection at very low levels.

All patients admitted to The Harley Street Clinic (including day cases) are screened for MRSA carriage.

Meet the team

The cardiac unit provides a high level of surgical and medical care with a 24 hour resident doctor cover to assist the surgeons and cardiologists in delivering the highest standard of care.

Every day, our leading heart consultants and specialist nurses carry out pioneering work using highly advanced medical equipment.



Dr Wyn Davies



Dr Vias Markides



Dr Jonathan Clague



Dr Edward Rowland



Dr John Foran



Dr David Ward



Dr Tom Wong



Dr Jas Gill



Dr Martin Lowe



Dr William Wallis

To arrange an appointment to see one of our consultants
call **+44 (0)8444 121 929**

Directions

The Harley Street Clinic

35 Weymouth Street
London W1G 8BJ

The nearest Tube stations

Regents Park (Bakerloo line)

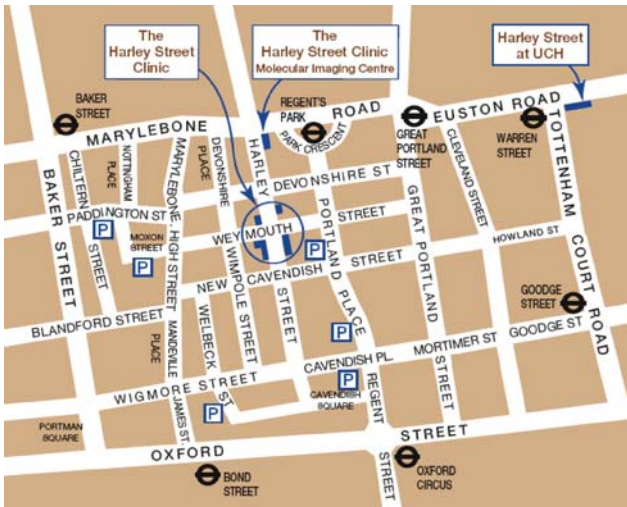
Bond Street (Central and Jubilee lines)

Oxford Circus (Central, Bakerloo and Victoria lines)

Baker Street (Bakerloo, Circle, Hammersmith and City, Jubilee and Metropolitan lines)

Parking Information

The nearest long stay car park is run by Westminster City Council and is at Queen Anne Mews. The nearest National Car Park (NCP) is in Cavendish Square. Short term meter parking is also available in surrounding streets.



References

1. Arrhythmia Alliance Website. Available at www.heartrhythmcharity.org.uk
2. Department of Health. National Services Framework for Coronary Heart Disease. Chapter Eight: Arrhythmias and Sudden Cardiac Death. March 2005
3. American Heart Association Website. Available at <http://www.americanheart.org/presenter.jhtml?identifier=3062868>
4. British Heart Foundation Website. Available at http://www.bhf.org.uk/living_with_a_heart_condition/understanding_heart_conditions/types_of_heart_conditions/heart_rhythms.aspx
5. National Heart, Lung and Blood Institute Website. Available at http://www.nhlbi.nih.gov/health/dci/Diseases/arr/arr_causes.html
6. Arrhythmia Alliance, Heart Rhythm Booklet. Available at http://www.heartrhythmcharity.org.uk/Documents/Booklets/HeartRhythmn_Booklet.pdf
7. Texas Arrhythmia Institute. Available at <http://www.txai.org/edu/arriadiag/ecg.htm>
8. Cleveland Clinic Website. Available at <http://my.clevelandclinic.org/heart/disorders/electric/arrhythmia.aspx>