

# Tachycardia

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Tachycardia is a form of cardiac arrhythmia which refers to a rapid beating of the heart. By convention the term refers to heart rates greater than 100 beats per minute in the adult patient. Tachycardia may be a perfectly normal physiological response to stress. However, depending on the mechanism of the tachycardia and the health status of the patient, tachycardia may be harmful, and require medical treatment. In extreme cases, tachycardia can be life threatening. Tachycardia can be harmful in three ways. Firstly, if the heart is pumping too fast for an extended period of time it will change the balance of oxygen and carbon dioxide in the hemoglobin in the blood; this is normal during exercise but when resting this is quite dangerous. Second, when the heart beats too rapidly, it may pump blood less efficiently. Thirdly, the faster the heart beats, the more oxygen and nutrients the heart requires. This may leave patients feeling out of breath or cause angina. This can be especially problematic for patients suffering from ischemic heart disease. ([From the Wikipedia article Tachycardia.](#))

## Recent Publications on Tachycardia:



- [Diastolic Intracellular Calcium-Membrane Voltage Coupling Gain and Postshock Arrhythmias. Role of Purkinje Fibers and Triggered Activity.](#)  
*Rationale: Recurrent ventricular arrhythmias after initial successful...* 21st November, 2009  
Krannert Institute of Cardiology and the Division of Cardiology,- Circ Res. 2009 Nov 19. ([DOI Direct Link](#))
- [Octopus Papillary Muscle Associated with a Left Lateral Accessory Pathway.](#)  
*Left ventricular papillary muscle abnormalities are rare malformations...* 21st November, 2009  
Adult Congenital Heart Disease Center, Emory University, Atlanta, Ga, USA;- Congenit Heart Dis. 2009 Nov;4(6):481-484. ([DOI Direct Link](#))
- [Is the Mechanism of Supraventricular Tachycardia in Pediatrics Influenced by Age, Gender or Ethnicity?](#)  
*Background. The mechanism of supraventricular tachycardia (SVT) in adults...* 21st November, 2009  
Department of Cardiology, Ochsner Clinic Foundation, New Orleans, LA, USA.- Congenit Heart Dis. 2009 Nov;4(6):464-468. ([DOI Direct Link](#))
- [Bradypedia: Is Gait Speed Ready for Clinical Use?](#)  
*Mobility, or locomotion, could be considered a distinguishing feature of...* 20th November, 2009  
S. Studenski, University of Pittsburgh, Staff Physician, Pittsburgh- J Nutr Health Aging. 2009;13(10):878-880.
- [Anesthetic management of a patient with hyperthyroidism due to hydatidiform mole.](#)  
*Secondary hyperthyroidism can often complicate gestational trophoblastic...* 19th November, 2009  
Department of Anesthesiology and Intensive Care Medicine, 1-1- J Anesth. 2009 Nov;23(4):594-596. Epub 2009 Nov 18. ([DOI Direct Link](#))
- [Primary cardiac lymphoma: diagnostic tools and treatment challenges.](#)

- Primary cardiac lymphoma (PCL) is a rare malignancy and the optimal...* 19th November, 2009  
Department of Medical Oncology, St Vincents University Hospital, Dublin 4,- Ir J Med Sci. 2009 Nov 17. ([DOI Direct Link](#))
- [Heart Rate Reduction for 12 Months With Ivabradine Reduces Left Ventricular Mass in Cardiac Allograft Recipients.](#)  
*BACKGROUND.: Graft denervation in heart transplant recipients causes sinus...* 19th November, 2009  
1 Department of Cardiology, University of Heidelberg, Heidelberg, Germany.- Transplantation. 2009 Sep 27;88(6):835-841. ([DOI Direct Link](#))
  - [Radiofrequency Catheter Ablation of Atrial Tachycardia Under Navigation Using the EnSite Array.](#)  
*Background: Atrial tachycardia (AT) is sometimes difficult to eliminate by...* 19th November, 2009  
EP Expert Doctors-Team Tsuchiya.- Circ J. 2009 Nov 18.
  - [Three-Dimensional Electroanatomic Mapping Systems in Catheter Ablation of Atrial Fibrillation.](#)  
*Atrial fibrillation (AF) is the most common tachyarrhythmia, with a...* 19th November, 2009  
Division of Cardiology, Department of Medicine, Taipei Veterans General- Circ J. 2009 Nov 18.
  - [Does This Patient With Palpitations Have a Cardiac Arrhythmia?](#)  
*CONTEXT: Many patients have palpitations and seek advice from general...* 19th November, 2009  
Brigham and Women's Hospital, Harvard Medical School, 1620 Tremont St, Ste- JAMA. 2009 Nov 18;302(19):2135-2143. ([DOI Direct Link](#))
  - [The calsequestrin mutation CASQ2D307H does not affect protein stability and targeting to the JSR but compromises its dynamic regulation of calcium buffering.](#)  
*Mutations in cardiac ryanodine receptor (RyR2) and cardiac calsequestrin...* 19th November, 2009  
The Ohio State University, United States;- J Biol Chem. 2009 Nov 17. ([DOI Direct Link](#))
  - [Safety of Binodenoson, a Selective Adenosine A2A Receptor Agonist Vasodilator Pharmacological Stress Agent, in Healthy Subjects With Mild Intermittent Asthma.](#)  
*BACKGROUND: The pharmacological stress agents adenosine and dipyridamole...* 19th November, 2009  
Vanderbilt University Medical Center, Nashville, Tenn; Iowa Clinical- Circ Cardiovasc Imaging. 2009 Nov 1;2(6):492-498. Epub 2009 Sep 17. ([DOI Direct Link](#))
  - [Hypersensitivity to mesalazine in a patient with inflammatory bowel disease: a case report.](#)  
*A 32-year-old male presented with diarrhoea, mucus and bleeding per...* 18th November, 2009  
- Cases J. 2009 Aug 25;2:6715. ([DOI Direct Link](#))
  - [Diabetic ketoacidosis with pneumomediastinum: a case report.](#)  
*An 18-year-old male with type 1 diabetes mellitus presented to the...* 18th November, 2009  
Department of Internal Medicine, University of Tennessee College of- Cases J. 2009 Sep 9;2:8095. ([DOI Direct Link](#))

## BioNews Results for Tachycardia

- [Life Sciences: Recent findings in life sciences in children described by researchers from Hacettepe University, Department of Pediatric Cardiology](#)  
*NewsRX: Nov 19 2009 6:01AM Matching: tachycardia*
- [Exercise-Linked Irregular Heartbeats may Not Harm Healthy Older Adults](#)  
*MedIndia: Nov 19 2009 10:22PM Matching: tachycardia*
- [Nifekalant versus lidocaine for in-hospital shock-resistant ventricular fibrillation or tachycardia](#)  
*MDLinx: Nov 18 2009 12:57PM Matching: tachycardia*
- [Healthy Older Adults Not At Risk From Exercise-Linked Ventricular Tachycardia](#)  
*Medical News Today: Nov 17 2009 4:57PM Matching: tachycardia*
- [Rapid, Erratic Heartbeats: Exercise-Linked Ventricular Tachycardia is Not a Risk to Healthy Older Adults-11/16/09](#)  
*Johns Hopkins Medicine: Nov 17 2009 1:35PM Matching: tachycardia*

- [Rapid, Erratic Heartbeats: Exercise-linked Ventricular Tachycardia Is Not a Risk to Healthy Older Adults](#)  
*Newswise: Nov 17 2009 6:53AM Matching: tachycardia*
- [Medical News: Healthy Older Adults Not At Risk From Exercise-Linked Ventricular Tachycardia](#)  
*BioFind: Nov 17 2009 5:47PM Matching: tachycardia*
- [AHA: Postmortem genetic testing may be inexpensive way to ID familial risk](#)  
*HealthImaging: Nov 17 2009 1:16AM Matching: tachycardia*
- [Rapid, Erratic Heartbeats: Exercise-Linked Ventricular Tachycardia Is Not a Risk to Healthy Older Adults](#)  
*Individual.com: Nov 17 2009 9:52AM Matching: tachycardia*
- [No improvement in post-op CV events with liberal RBC transfusion strategy](#)  
*MedWire News: Nov 17 2009 6:23PM Matching: tachycardia*
- [Postmortem Genetic Tests After Sudden Death May Provide Less Expensive Way To Identify Risk To Surviving Relat](#)  
*Medical News Today: Nov 17 2009 4:45PM Matching: tachycardia*
- [Where should we FOCUS on the topic of postop tranfusion?](#)  
*Theheart.org: Nov 17 2009 2:35PM Matching: tachycardia*
- [Families Could Benefit From Gene Tests in Sudden Cardiac Death Victims](#)  
*EverydayHealth.com: Nov 17 2009 1:16AM Matching: tachycardia*
- [AHA: Postmortem genetic testing may be inexpensive way to ID familial risk](#)  
*Cardiovascular Business: Nov 16 2009 7:16PM Matching: tachycardia*
- [\[Clinical Picture\] Tamponade with a thickened pericardium](#)  
*Lancet Infectious Diseases: Nov 16 2009 5:53PM Matching: tachycardia*

## Tachycardia Patents:



- 7599733- [Frequency domain monitoring of myocardial electrical stability](#)
- 7607036- [System and method for enabling continued use of trim values within an implantable medical device following a parity error](#)
- 7608284- [Enamel matrix protein composition for treatment of systemic inflammatory response syndrome](#)
- 7608458- [Identifying patients at risk for life threatening arrhythmias](#)
- 7608701- [Corticotropin releasing factor 2 receptor agonists](#)
- 7610083- [Method and system for loop recording with overlapping events](#)
- 7610086- [System and method for detecting cardiac ischemia in real-time using a pattern classifier implemented within an implanted medical device](#)
- 7610087- [Implantable cardioverter defibrillator with automatic switching to a pre-set pacing mode following delivery of a shock](#)
- 7610089- [Implantable strain sensor for medical diagnostics](#)
- 7610090- [Implantable medical device with automatic sensing adjustment](#)
- 7610092- [Leadless tissue stimulation systems and methods](#)
- 7606621- [Implantable transducer devices](#)
- 7606620- [System and method for detection enhancement programming](#)
- 7606618- [Implantable medical device with notification system](#)
- 7599738- [Synchronized ventricular pacing to promote atrial sensing](#)

- 7599740- [Ventricular event filtering for an implantable medical device](#)
- 7601856- [Benzofurans as potassium ion channel modulators](#)
- 7603154- [Non-invasive left ventricular volume determination](#)
- 7603172- [System and method of using regression models to estimate vulnerable periods for heart stimulation parameters](#)
- 7604959- [Cell-based assays employing voltage and calcium dyes](#)
- 7605137- [Combination therapy comprising cloretazine](#)
- 7606609- [Devices and methods for cardiac mapping of an annular region](#)
- 7606616- [Calibration of adaptive-rate pacing using intrinsic chronotropic response](#)
- 7606617- [Urinalysis for the early detection of and recovery from worsening heart failure](#)
- 7610094- [Synergistic use of medical devices for detecting medical disorders](#)
- 7611471- [Heart diagnosis system](#)
- 7615015- [Focused ultrasound ablation devices having selectively actuatable emitting elements and methods of using the same](#)
- 7616988- [System and method for detecting an involuntary muscle movement disorder](#)
- 7616993- [Heart stimulator using a Bezier function to define AV-delay values](#)
- 7616994- [Fast post-antitachycardia pacing redetection algorithm](#)
- 7618786- [Method for identifying modulators of human orexin-2 receptor](#)
- 7618954- [Inositol pyrophosphates, and methods of use thereof](#)
- 7619002- [Use of polyunsaturated fatty acids for the primary prevention of major cardiovascular events](#)
- 7619005- [Methods for treating cognitive impairment in humans with Multiple Sclerosis](#)
- 7620447- [Method for assessing the contraction synchronization of a heart](#)
- 7620448- [Methods and devices for monitoring myocardial mechanical stability](#)
- 7615012- [Broadband acoustic sensor for an implantable medical device](#)
- 7613513- [System and method for determining cardiac geometry](#)
- 7613512- [Gradually synchronized simultaneous atrial and ventricular pacing for cardiac rhythm discrimination](#)
- 7611851- [Canis sphingosine 1-phosphate receptor isoform 1](#)
- 7611852- [Functional cardiomyocytes from human embryonic stem cells](#)
- 7611879- [27877, 18080, 14081, 32140, 50352, 16658, 14223, 16002, 50566, 65552 and 65577 molecules and uses therefor](#)
- 7612035- [Inhibition of mitogen-activated protein kinase \(MAPK\) pathway: a selective therapeutic strategy against melanoma](#)
- 7612067- [Imidazopyridazine compounds](#)
- 7612181- [Dual variable domain immunoglobulin and uses thereof](#)
- 7612291- [Composite wire for implantable cardiac lead conductor cable and coils](#)
- 7613343- [Nosologic system of diagnosis](#)
- 7613499- [Method and system for concurrent localization and display of a surgical catheter and local electrophysiological potential curves](#)
- 7613508- [Implantable cardiac stimulation device, system and method which provides an electrogram signal facilitating measurement of slow-changing electrogram features](#)
- 7620458- [Sheath and electrical lead](#)

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