Paroxysmal Supraventricular Tachycardia (PSVT) Checklist

Working together to improve the diagnosis, treatment and quality of life for all those affected by arrhythmias

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The Paroxysmal Supraventricular Tachycardia (PSVT) Checklist was created under the guidance of Arrhythmia Alliance’s expert Medical Advisory Committee. Its principal aim is to help you and your doctor reach the correct diagnosis for unexplained fast heart rate.

This checklist gives you information and advice on the reasons for experiencing palpitations or a fast heart rate, helps you prepare for a doctor’s appointment, and provides information on what to expect if you have to attend a hospital appointment.

**Checklist: What do you need to know?**

**What is PSVT?**
PSVT is a condition characterised by sudden and unexpected episodes of a very fast heart rate that originate in an area of the heart above the ventricles. Paroxysmal means from time to time.

**What is the background?**
The heart has four chambers – two upper atria, and two lower ventricles. Normally the chambers contract in a coordinated way, starting with an electrical signal originating at the sinoatrial node (SAN). This signal moves across the atria causing them to contract and empty blood into the lower ventricles. The signal passes through the atrio-ventricular node (AVN) and down to the ventricles, which then contract and move blood into the arterial system of the body.

In PSVT, an abnormal electrical pathway causes the heart to beat much faster than normal, up to as high as 250 beats per minute (a normal heart rate is 60-100 beats per minute). These episodes can be short lived for just a few minutes or last several hours. PSVT is commonly misdiagnosed as anxiety or panic attacks.

**What are the causes of PSVT?**
There are two types of PSVT that account for roughly 90% of cases; both of these are reentrant tachycardias. However, Wolff Parkinson White syndrome (WPW) is likely to be most common in children. It can also be caused by some medicines, such as digitalis, excessive alcohol or caffeine intake, illicit drug use, and smoking.

**What are some of the symptoms?**
Symptoms are intermittent, starting and stopping suddenly with little or no warning. Chest tightness, palpitations (awareness of the heart beat), shortness of breath, dizziness and fainting are most commonly experienced.

**Investigations for PSVT**
If you think you are suffering from PSVT, a doctor will examine you and will feel your pulse to measure your heart rate.

An electrocardiogram (ECG) will be done to gather more information about your heart rate and rhythm. Electrophysiology studies (EPS) may be done to give an accurate diagnosis and treatment options. This involves more invasive investigations including inserting a catheter containing small flexible wires into a blood vessel in your groin and threading it up to your heart. The heart’s rate and rhythm can then be evaluated more accurately.

Since PSVT occurs intermittently, the abnormal heart rate may not be captured on a standard ECG recording. Therefore, a monitor may be worn at home for 24/48/72 hours, or even longer, to try to get an accurate diagnosis.
Treatment options for PSVT

If PSVT occurs very infrequently, no treatment may be needed. There are self-help manoeuvres that can be done to try to terminate an episode of PSVT:

- **Valsalva manoeuvre** - This involves holding your breath and straining at the same time
- **Coughing**
- **Cough whilst sitting forward**
- **Cold water**
- **Avoid smoking, caffeine, alcohol, illicit drugs use**

Treatment for controlling the heart rate during an episode of PSVT may include electrical cardioversion (a controlled electric shock is delivered to try and reset the heart into a normal pattern) or intravenous medicine, such as adenosine.

Although PSVT is not life threatening, it can cause unpleasant symptoms and interfere with your quality of life. Catheter ablation aims to cure the abnormal heart rhythm by destroying the area of cells responsible for the arrhythmia without affecting the rest of the heart. Catheter ablation is a minimally invasive procedure which is usually performed using local anaesthetic and sedation. During the procedure, each catheter is passed along your blood vessels and directed to your heart; this is done with the guidance of an x-ray machine. Once the wires are positioned within the heart, extra beats are delivered using an external pacemaker, which may bring on your palpitations. This is necessary to see the area of the heart where the abnormal rhythm is coming from. Once the abnormality has been found, the doctor performing the procedure will begin to ablate the pathway or area of electrical cells.

For people with more regularly occurring episodes of PSVT, treatment options include medications such as flecaïnide or propafenone, pacemakers, and/or surgery.

See ‘Treatment Options for Arrhythmias’ booklet for more information on these procedures.
Checklist: Preparing for an appointment with your GP

Before visiting your doctor, it is important to write down what happens before, during and after an episode, including any symptoms you may experience.

Try to take along a family member or friend who has been with you when you've had an episode. If they cannot accompany you, ask them to write down exactly what they witnessed in this booklet, or ask them how the doctor could make contact if necessary.

Family history; check with relatives whether there is any family history of arrhythmia, blackouts, faints, heart conditions etc.

If there are any questions you want to ask your doctor or specialist, make a note of them on the checklist as it can be easy to forget to ask them during the consultation.

Ask for a referral to a cardiologist/electrophysiologist (heart rhythm expert) if possible.

Make detailed notes – use the space later in the checklist.

Take the checklist and your notes with you to your appointment.

Checklist: Questions to ask your GP

During your GP appointment it can be hard to remember everything. Here are some suggestions of questions which you may find useful to ask during your appointment. There is a section on this checklist for you to make a note of any questions for your GP.

• Can I go the gym/play sport whilst I am waiting to see the specialist?
• Can I still drive whilst I am waiting to see the specialist?
• What kind of tests might I have to have?
• What will possible treatments involve?
• What do I do in an emergency if I can’t get my heart to settle at home?
• How do I perform the Valsalva manoeuvre?

Checklist: Questions to ask your cardiologist following a referral

Following an appointment with your GP, you may be referred to a cardiologist for further investigations. Similarly to an appointment with you GP, it may be useful for you to take along a friend or family member to your appointment for emotional support, and so that they can relay their accounts of an episode to the cardiologist.

Take along any information or notes you may have, including this checklist. Make a list of any questions you need to ask, and be as prepared as you can. It helps to bring a list of all of your current medications with you if this is applicable to you.

Questions you may wish to ask your cardiologist may be similar to the questions you asked your GP. These are some questions commonly asked during this process.

• What medical investigations will be done?
• Will there be any discomfort during these examinations?
• How long might this process take?
• How long will it take before I get a diagnosis?
• What treatments will be available to me after diagnosis?
• Will a diagnosis affect activities I am able to do?
Preparing your own checklist

To give the doctors the best chance of making the right referral or diagnosis you should provide as many details as possible about your symptoms and episodes.

Name: ............................................................................................................................................................................

1. List any medication(s) you are taking: ............................................................................................................................................................................
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2. Do you experience any of these symptoms?

- [ ] Rapid pulse
- [ ] Irregular heart beat
- [ ] Anxiety or panic attacks
- [ ] Fatigue
- [ ] Fainting/ blackouts
- [ ] Sweating
- [ ] Palpitations
- [ ] Chest tightness, pain, discomfort or pressure
- [ ] Shortness of breath
- [ ] Dizziness/ feeling light headed
- [ ] Fainting during exercise
- [ ] Other (Give details below)

3. How long have you been experiencing symptoms for?

- [ ] 0-3 months
- [ ] 3-6 months
- [ ] 6 months to a year
- [ ] Over a year
- [ ] Other (Give details below)

4. How frequently do you experience episodes?

- [ ] Every now and then/ very occasionally
- [ ] Once every few weeks
- [ ] Daily
- [ ] Once every few months
- [ ] At least once a week
5. **Is there anything in particular that seems to trigger an episode?**

- [ ] After taking certain medications
- [ ] Drinking alcohol
- [ ] Tiredness
- [ ] Anxiety
- [ ] Exercise
- [ ] Smoking
- [ ] Drinking caffeine
- [ ] Stress
- [ ] Other (Give details below)

6. **When you experience an episode, how long does it normally last for?**

- [ ] A few minutes
- [ ] 15 to 30 minutes
- [ ] Several hours
- [ ] Up to 15 minutes
- [ ] 30 minutes to an hour
- [ ] Other (Give details below)

7. **Do your palpitations come on and stop suddenly, or do they come on gradually and then disappear gradually?**

8. **Have you had any investigations such as an ECG or an echocardiogram, and do you have the results?**

**NOTES:**