Management of Cardiac Manifestations in Antiphospholipid (Hughes') Syndrome (APS)

A Guide for Patients

Introduction

Antiphospholipid Syndrome (APS) is an autoimmune disorder characterised by the presence of antiphospholipid antibodies, which increase the risk of blood clots. These clots can affect the heart and lead to various cardiac complications. This leaflet provides information on understanding and managing the cardiac manifestations of APS.

Cardiac Manifestations in APS

1. **Coronary Artery Disease (CAD)**:
    - Narrowing or blockage of the coronary arteries.
    - Can lead to chest pain (angina) or heart attacks.
2. **Valvular Heart Disease**:
    - Thickening or dysfunction of the heart valves often the mitral or aortic valve
    - Can result in heart murmurs and affect heart function.
3. **Myocardial Infarction (Heart Attack)**:
    - Occurs when a blood clot blocks blood flow to the heart muscle.
    - Can cause severe chest pain, shortness of breath, and other serious symptoms.
4. **Cardiomyopathy**:
    - Disease of the heart muscle that makes it harder for the heart to pump blood.
    - Can lead to heart failure.
5. **Intracardiac Thrombus** (blood clot)
    - Blood clots that form within the heart because of APS.
    - Can cause blockages or clots can travel to other sites and lead to stroke or heart attack.

Symptoms of Cardiac Manifestations

- Chest pain or discomfort often in the middle of the chest, the jaw or left arm
- Shortness of breath.
- Fatigue or weakness.
- Irregular heartbeat or palpitations.
- Swelling in the legs, ankles, or feet.
- Dizziness or fainting.

If you experience these symptoms, seek immediate medical attention.

Risk Factors

- Positive antiphospholipid antibodies, especially if double or triple positive (where 2 or all three of the standard APS blood tests are persistently positive).
- History of blood clots or cardiovascular events.
- Conventional cardiac risk factors when added to the APS risk

- Hypertension (high blood pressure).
- Diabetes.
- Smoking.
- High cholesterol.
- Family history of heart disease.
- Sedentary lifestyle.

Prevention and Management Strategies

1. **Regular Monitoring**:
   - Regular follow-ups with your healthcare provider.
   - Blood tests to monitor antiphospholipid antibody levels and blood clotting status.
   - Regular cardiovascular assessments, including ECG, echocardiograms, and stress tests.
2. **Medications**:
   - **Anticoagulants**: Warfarin or heparin to reduce the risk of blood clots.
   - **Antiplatelet Agents**: Low-dose aspirin to prevent clot formation.
   - **Statins**: To manage cholesterol. These may also have immune modulating effects
   - **Antihypertensives**: To control blood pressure.
   - **Beta-blockers**: To manage heart rate and reduce blood pressure.
   - **ACE Inhibitors or ARBs**: To manage blood pressure and protect heart function.
3. **Lifestyle Modifications**:
   - **Healthy Diet**: Low in saturated fats and cholesterol, rich in fruits, vegetables, and whole grains.
   - **Regular Exercise**: At least 30 minutes of moderate-intensity exercise most days of the week.
   - **Weight Management**: Maintaining a healthy weight to reduce cardiac risk.
   - **Smoking Cessation**: Avoid smoking and exposure to secondhand smoke.
   - **Limit Alcohol**: Drink in moderation if at all.

Specific Management of Cardiac Manifestations

1. **Coronary Artery Disease (CAD)**:
   - **Medications**: As prescribed for angina and to prevent heart attacks.
   - **Procedures**: Angioplasty or coronary artery bypass grafting (CABG) if necessary.
2. **Valvular Heart Disease**:
   - **Monitoring**: Regular echocardiograms to assess valve function.
   - **Medications**: To manage symptoms including chest pain and prevent complications including heart failure
   - **Surgery**: Valve repair or replacement if severe.
3. **Myocardial Infarction (MI)**:

    - **Immediate Treatment**: Emergency medical care to restore blood flow.
    - **Post-MI Care**: Medications, lifestyle changes, and cardiac rehabilitation.
4. **Cardiomyopathy**:
    - **Medications**: To improve heart function and manage symptoms.
    - **Lifestyle Changes**: Diet, exercise, and weight management.
    - **Devices**: Pacemakers or implantable cardioverter-defibrillators (ICDs) if necessary.
5. **Intracardiac Thrombi**:
    - **Anticoagulation Therapy**: To dissolve clots and prevent new ones.
    - **Monitoring**: Regular imaging tests to assess for thrombi.

When to Seek Immediate Medical Attention

- Sudden, severe chest pain or discomfort.
- Shortness of breath, especially if sudden or severe.
- Sudden dizziness, lightheadedness, or fainting.
- Rapid or irregular heartbeat.
- Severe swelling in the legs, ankles, or feet.
- Any new or worsening symptoms despite treatment.

Support and Resources

- **Support Groups**: Connecting with others who have APS or associated conditins such as lupus or other cardiac conditions can provide emotional support and practical advice.
    - British Heart Foundation https://www.bhf.org.uk
    - Lupus UK: https://lupusuk.org.uk
- **Patient Education Materials**: More information about individual conditions are available from the following websites as well as the ones above
    - https://www.nhs.uk/conditions/coronary-heart-disease/
- **Specialists**: Which specialists are involved in care of cardiac conditions associated with Hughes Syndrome/APS? In general, Cardiologists, Haematologists, and Rheumatologists often work together to provide co-ordinated care.

Conclusion

Managing the cardiac manifestations of APS involves a combination of medical treatments, lifestyle changes, and regular monitoring. By working closely with your healthcare team, you can effectively manage these risks and maintain a good quality of life.

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