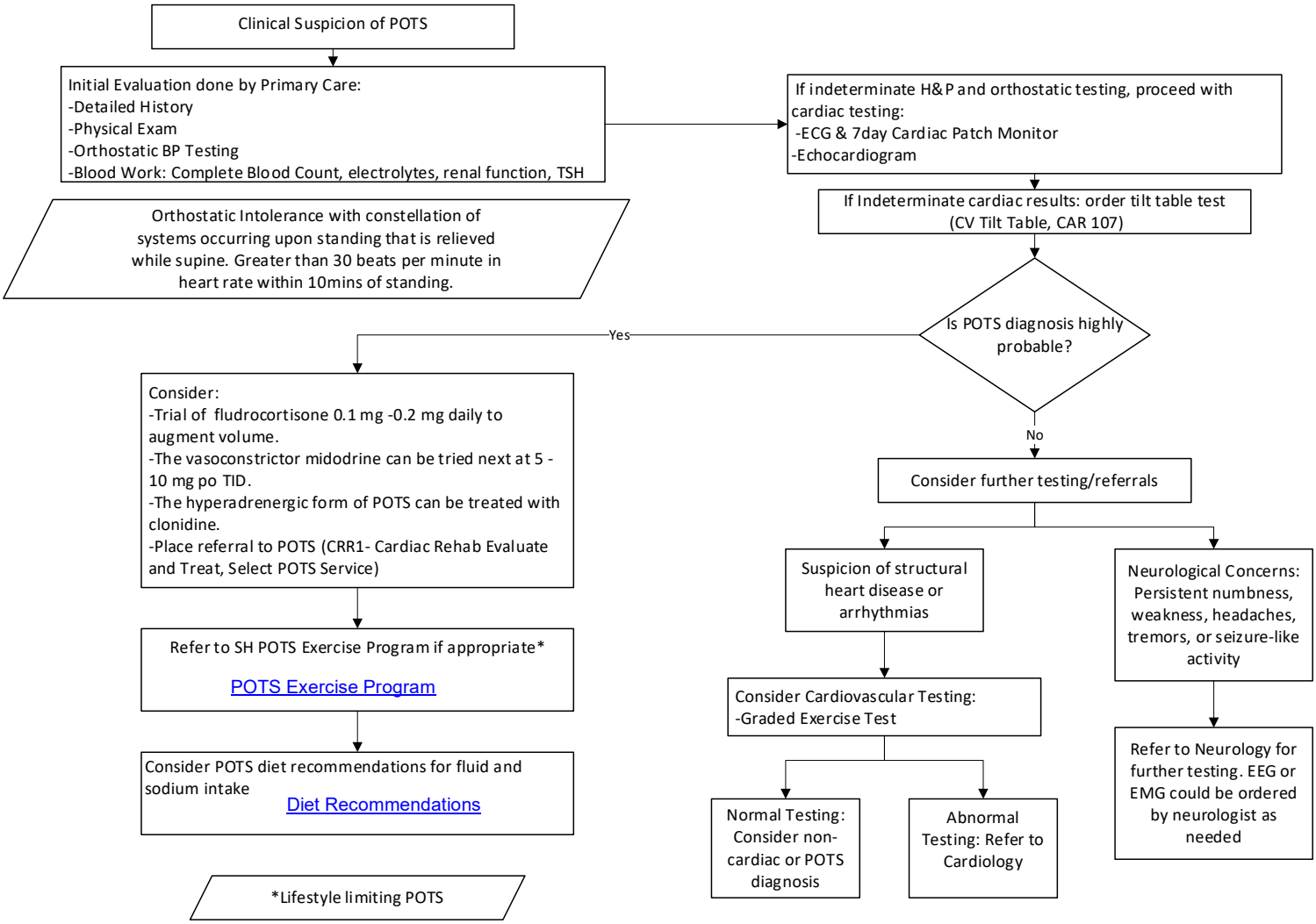
Clinical Standardization

POSTURAL ORTHOSTATIC TACHYCARDIA SYNDROME (POTS) MANAGEMENT, ADULT, OUTPATIENT, PATHWAY

Updated: November 17, 2022

Clinical algorithm:



Clinical Pathway Summary

CLINICAL PATHWAY NAME: Postural Orthostatic Tachycardia Syndrome (POTS) Management

PATIENT POPULATION AND DIAGNOSIS: Outpatients with suspected POTS.

APPLICABLE TO: Primary Care and Specialty Offices

BRIEF DESCRIPTION: The pathway provides direction for the evaluation and management of patients with suspected or confirmed POTS.

OPTIMIZED EPIC ELEMENTS (if applicable):

IMPLEMENTATION DATE: November 2022

LAST REVISED: November 2022

Clinical pathways clinical approach

TREATMENT AND MANAGEMENT:

A. The hallmark of POTS is orthostatic intolerance with a constellation of symptoms (palpitations, exercise intolerance, fatigue, near syncope, tremors, headaches, etc.) occurring upon standing that is relieved while supine. The pathology resulting in POTS is thought to be a peripheral autonomic neuropathy characterized by the failure of the peripheral vasculature to constrict during normal orthostatic stress. It commonly occurs after a viral illness, sepsis, pregnancy, or trauma. There is a 5:1 female predominance. POTS is currently defined as a > 30 beats per minute increase in heart rate within 10 minutes of standing with a minimal decrease or even increase in blood pressure.
B. The *initial* evaluation of these patients should be completed by their primary care provider.
    I. A detailed history and physical exam are important. Most patients report an abrupt onset of symptoms.
        a. Complete orthostatic BP Testing: Blood pressure, heart rate, pulse ox should be taken supine, sitting, and standing at 2, 5, and 10-minute intervals after standing.
        b. If the diagnosis is still indeterminate with simple orthostatic testing, obtain electrocardiogram and 7-day cardiac patch monitor.
        c. Depending on findings a head up tilt table test without pharmacological provocation can be performed. The lower extremities should be viewed during this evaluation to look for the development of a mottled, bluish discoloration (acral cyanosis) that suggests peripheral blood pooling.

C. Upon POTS diagnosis, the cornerstone of treatment is reconditioning. Guideline driven care includes:
   I. POTS program is available through the SH Cardiac Rehab program.
   II. Fluid intake of 2 liters/day and sodium loading of 3-5 gram/day is encouraged for all patients except those with hypertension or the hyperadrenergic form of POTS, which has orthostatic hypertension as well. POTS Diet and Fluid Recommendations
   III. Medicines that may be trialed:
      a. Fludrocortisone 0.1 mg -0.2 mg daily to augment volume.
      b. The vasoconstrictor midodrine can be tried next at 5 -10 mg po TID.
      c. The hyperadrenergic form of POTS can be treated with clonidine.
      d. IV infusions of saline are not a therapy we advocate at SH Cardiovascular Medicine.

Pathway information

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CPC APPROVAL DATE: October 27, 2022**,** December 1, 2022

OTHER TEAM(S) IMPACTED:

References

Grubb BP, Kanjwal Y, Kosinski DJ. The postural tachycardia syndrome: A concise guide to diagnosis and management. *J Cardiovasc Electrophysiol*. 2006;17(1):108-112. doi:10.1111/j.1540-8167.2005.00318.x