

ARTICLE



Comprehensive Assessment & Symptoms of Heart Failure-CASH

Assessment of patients who present with signs and symptoms suggestive of new onset heart failure or exacerbation of chronic heart failure requires a comprehensive approach as outlined on these cards. Use your "cash" card to insure appropriate assessment of all patients.

POTENTIAL CAUSES OF HEART FAILURE:

- Coronary artery disease
 - √ ischemia
 - √ acute myocardial infarction
- Hypertension
- Diabetes
- Valvular heart disease
- Rheumatic fever
- Collagen vascular disease
- Thyroid excess or deficiency
- Family history of heart disease
- Chest irradiation
- Fluid overload from noncardiac causes
- Obstructive sleep apnea
- Exposure to cardiotoxic agents (e.g. neoplastic agents)
- Current or past illicit drug use
- Current or past alcohol abuse
- Sexually transmitted diseases
- Bacterial or parasitic infection
- Pheochromocytoma
- Persistent atrial fibrillation

PRECIPITATING CAUSES OF DECOMPENSATED HEART FAILURE:

- Excessive dietary sodium intake
- Medication nonadherence
- Uncontrolled hypertension
- Myocardial ischemia or infarction
- Dysrhythmias
- Adverse drug effects
 - √ NSAIDs
 - √ Glitizones
 - √ Some calcium channel blockers (felodipine and amlodipine are safe), antidysrhythmics (Vaughn Williams Class I)
- Comorbidities
 - √ fever/infection/sepsis
 - √ thyroid dysfunction
 - √ anemia
 - √ renal insufficiency
 - √ pulmonary diseases
 - √ sleep apnea
 - √ nutritional deficiencies

SIGNS OF HEART FAILURE:

- Tachycardia
- Third heart sound (S3)
- Increased jugular venous pressure
- Positive hepatojugular reflux
- Bilateral crackles
- Peripheral edema not due to venous insufficiency
- Laterally displaced apical impulse
- Weight gain
- Abdominal distention (**Note:** These signs are generally associated with congestion; not all patients with acute heart failure are congested).

SYMPTOMS OF HEART FAILURE:

- Dyspnea on exertion
- Dyspnea at rest
- Orthopnea
- Paroxysmal nocturnal dyspnea
- Fatigue
- Decreased exercise tolerance
- Unexplained cough, especially at night
- Acute confusion or delirium
- Abdominal or gastrointestinal symptoms (e.g. nausea, bloating, abdominal pain, anorexia)
- Decreased food intake
- Decline in functional status

LABORATORY AND DIAGNOSTIC TESTS ON INITIAL EVALUATION OF HEART FAILURE:

- Complete blood count
- Urinalysis
- Serum electrolytes including calcium and magnesium
- Blood urea nitrogen
- Serum creatinine
- B-type natriuretic peptide
- Fasting lipid panel

- Fasting blood glucose
- Liver function tests
- Drug levels of relevant medications (e.g., digoxin)
- Thyroid panel
- 12-lead electrocardiogram
- Chest radiograph
- Two-dimensional echocardiography
- Radionuclide imaging (consider)
- Cardiopulmonary exercise testing (consider)
- Cardiac catheterization (consider)
- Myocardial biopsy for suspected myocarditis (consider)

ASSESSMENT QUESTIONS:

Symptoms

- What symptoms prompted you to seek medical care? When did they begin?
- Did your symptoms begin suddenly or gradually worsen over time?
- What makes the symptoms better/worse?
- Do the symptoms occur continuously or only with certain activities?
- Do symptoms improve with rest?
- Do you have any pain now? Did you recently have pain? Rate on a 0-10 scale.
- Has your heartbeat felt any different than usual? E.g., "race," "flutter," or "skip?"

Breathing

- Have you felt short of breath? Do you wake up short of breath at night?
- Can you speak as much as you like before getting short of breath?
- What makes your breathing easier?
- Do you cough? Is it worse than usual?
- Do you cough throughout the day or mostly in the morning?
- Do you cough up any secretions?
- Do you use oxygen at home?

Sleep

- Have symptoms kept you from sleeping?
- Do you sleep in bed or in a chair?
- Are you able to lie flat in bed?

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- How many pillows do you use to sleep? Is this more or less than usual?
- Have you recently slept more or less than usual? Do you feel rested?
- Ask spouse/significant other if patient snores or intermittently stops breathing during sleep.

Diet

- Have you recently eaten more salty foods or drank more water than usual?
- How often do you eat out?
- How often do you weigh yourself?
- Have you gained or lost weight recently?
- Have you experienced any swelling? Is swelling present all day or only evenings?
- How far up your legs do you have edema?
- Have you felt bloated or had edema?
- Are your clothes, belt, rings, and shoes tighter than 1 week or 1 month ago?
- Have you had nausea or abdominal pain?

Medications

- Have you taken all prescribed meds?
- Did you run out of any medications?
- Have you had diarrhea/vomiting that may have affected absorption of medications?
- Have you taken extra diuretic meds?
- Have you changed the dose of any med?
- Did any physician/NP recently prescribe different medications for you or change the dose of your medications?
- Do you take any over-the-counter medications or herbal supplements?

Activity

- How far can you walk?
- Can you dress, bathe, prepare food, climb stairs without stopping to rest?
- What activities could you do recently but not now because of worsened symptoms?
- Have you decreased your activity level?

Other

- Do you have difficulty remembering information or feelings of confusion?
- Have you had other health problems that may make your heart failure worse?