Congestive Heart Failure and Massage Therapy

A Webinar with Tracy Walton, MS, LMT

Part 5 of the Common Cardiovascular Conditions Webinar Series

Background

- Author
- Educator
- Researcher
- Massage Therapist
- Specialist in massage therapy and cancer care
Webinar 1: Blood clot symptoms & signs,
Webinar 2: Blood clot risk
Webinar 3: Hypertension and hypotension
Webinar 4: Angina, heart attack

Today’s Webinar:
Congestive Heart Failure

Learning Objectives

• Specific interview questions about CHF complications
• Significant massage adaptations for clients with CHF
• How the “Filter and Pump Principle” guides the massage session
Pretest

1. Which of the following is true of congestive heart failure (CHF)?
   a. The heart may not be able to fill efficiently
   b. The heart is weak, but has not abruptly stopped pumping
   c. the heart may not be able to pump efficiently
   d. All of the above are true of congestive heart failure (CHF)

Pretest

2. Which of the following statements describes CHF symptoms or signs?
   a. Swelling in feet and ankles when the right heart is affected
   b. Swelling in lungs when the right heart is affected
   c. Swelling in legs and abdomen when the left heart is affected
   d. Swelling in feet and ankles when the left heart is affected
3. Which massage position is likely to be the most comfortable for a client who has CHF with left heart failure?
   a. Supine with legs elevated
   b. Prone with extra support at waist
   c. Upright sitting with support at head
   d. Sidelying with legs elevated

4. Which one of the following principles specifies a non-circulatory massage session if a heart, liver, kidney, or spleen is compromised?
   a. The Vital Organ Principle
   b. The Filter and Pump Principle
   c. DVT Risk Principle 1
   d. The Plaque Problem Principle
5. Which one of the following CHF signs/symptoms, occurring in a patient with longstanding CHF, suggests the need for an immediate medical referral?
   a. Shortness of breath on exertion
   b. Fatigue
   c. Swelling in the ankles
   d. Sudden weight gain

6. Which of the following principles should be used with clients with CHF?
   a. DVT Risk Principle 1
   b. The Vital Organ Principle
   c. The Plaque Problem Principle
   d. All of the above should be used with clients with CHF
Background

Congestive Heart Failure (CHF)
Heart is too weak or stiff to fill or pump efficiently, cannot pump enough to meet the body’s needs.

Does not mean heart has stopped pumping

Can be acute or chronic

Statistics

• In US, nearly 5 million people have heart failure
• Next to childbirth, the most common reason for hospital admission
• 550,000 cases diagnosed each year
  – 1% of people age 50 yrs
  – 5% of people age 75 yrs or older
  – 25% of people 85 yrs or older
• 10% of people w/CHF die after 1 year
• 50% die within 5 years after diagnosis
If heart cannot **pump**

Can’t send blood out to tissues

**Ejection fraction** is the amt of blood ejected compared to max volume available to eject

Normal ejection fraction >50%

If heart cannot **fill**

Heart stiff (less compliant) when filling with blood

Flood backs up “upstream”

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**Conditions Leading to CHF**

- Coronary artery disease
- Hypertension
- Heart valve disorders
- Arrhythmias (heart rhythm disorders)
- Longstanding alcohol abuse
- Thyroid disorders
- Viral infection of muscle
- Certain medications + underlying CAD
Stages of Heart Failure

A. At **high risk** of developing CHF
B. **Asymptomatic** (but has structural heart disease)
C. Symptoms with mild to moderate **activity**
D. Symptoms **at rest** (has advanced structural heart disease)

Symptoms
Chronic Heart Failure Signs/Symptoms

Shortness of breath (SOB) (dyspnea) on exertion or lying down
Fatigue, weakness
Swollen feet, ankles, legs,
Swelling in genitals, abdomen (ascites)
Sudden weight gain
Rapid or irregular heartbeat
Cough, wheezing (white/pink phlegm)
Loss of appetite, nausea
Decreased alertness, confusion

Acute Heart Failure Signs/Symptoms

Same symptoms as chronic heart failure

but

Worsening
Sudden worsening
Sudden onset
A new symptom develops
Sudden fluid buildup
Sudden, severe SOB, coughing up pink, foamy mucus
Chest pain
(if heart attack is causing failure)
When Left Heart Fails

- Fluid collects in lungs
- Pulmonary edema
- Lung congestion impedes airway expansion
- SOB with activity
- SOB with lying down

When Right Heart Fails

- Fluid backs up in feet, lower legs
- As CHF worsens, backup in thighs
- As CHF worsens, backup in hips, genitals
- Worst: fluid backup in abdomen (ascites)
- Weight gain with fluid retention
- Edema is pitting
Complications of Heart Failure

- Kidney damage or failure
- Liver damage
- Heart valve problems
- Heart attack
- Stroke

End Stage

- 88% report breathlessness
- 75% of patients report pain
- 69% report fatigue
Treatment for Heart Failure

- Lower blood pressure
- Widen arteries to heart
- Avoid straining the heart
- Help heart pump more efficiently

Treatment

- Diuretics
- ACE inhibitors
- Angiotensin II receptor blockers
- Nitrates
- Beta blockers
- Natriuretic peptides
- Digoxin
- IV Inotropes (Stimulants)
Non-drug Treatments/Monitoring

Salt restriction
Fluid restriction
Lower extremity elevation
Exercise
Supplemental oxygen

Daily weight checks

Massage for Congestive Heart Failure?
Massage Guidelines for Heart Failure

Essentials

Heart Failure

Massage Therapy Guidelines

Follow “Plaque Problem Principle”

Follow DVT Risk Principles
Massage Guidelines for Heart Failure

Essentials  Massage Therapy Guidelines

Heart Failure

Follow DVT Risk Principle 1

Avoid general “circulatory massage”
Effleurage, Petrissage, or Repeated compressions

Pressure level 3 or above

"Circulatory massage"

The Massage Pressure Scale

Classifies massage pressures:

- Simple terms
- Tissues displaced
- Common uses
- Therapist body use

(From Walton, T. Medical Conditions and Massage Therapy: A Decision Tree Approach. Philadelphia: Lippincott Williams & Wilkins, 2011.)
The Filter and Pump Principle

If a filtering organ or a pumping organ (liver, kidney, spleen, the heart, or lymph node) is functioning poorly or overworking, do not work it harder with “circulatory” intent.

Heart Disease Continuum

Mild                Severe

CHF
Heart Disease Continuum

Mild  Severe

Stronger  Gentler

CHF

Massage Therapy Continuum

The Vital Organ Principle

If a vital organ is compromised in function, use gentle massage elements; do not place too much demand on the client’s body.
The Vital Organ Principle

Which of these massage elements needs to change?

How should it change?

Massage Therapy Guidelines

- Contact
- Lubricant
- Pressure
- Joint Movement
- Friction
- Position
- Site of massage
- Draping
- Speed
- Rhythm
- Session length
- Session timing
- Session intent
- Medical consultation
- Medical referral

The Interview and the Massage
**The Interview and the Massage**

When were you diagnosed with CHF?

*Longer ago = more familiarity, more complications*

Mild, moderate, or severe? Advanced?

*More severe/advanced → gentler massage overall*

Left or right heart affected?

*If left, ask about breathing problems;*

*If right, look for swelling in lower body*
The Interview and Massage

Symptoms?  At rest?  With activity?

*If symptoms occur at rest, adjust to advanced disease*

- Shortness of breath → Adapt positioning
- Fatigue, weakness → Gentle overall
- Swelling → No circulatory massage at site
- Sudden weight gain, changes in heartbeat, cough → Medical referral
- Confusion, ↓ alertness → Simple communication, get health info from caregiver, doctor

The Interview and Massage

Complications?  Effects on other organs [list]?

*If kidney failure, ask kidney failure ?s*
*If liver disease, ask liver ?s*
*If extremities affected, ask peripheral artery disease ?s*
*If stroke history, ask stroke ?s*
The Interview and the Massage

- Kidney failure
- Liver function
- Peripheral artery disease
- Stroke
- Skin health

The Kidney Failure Questions
The Kidney Failure Questions

Mild/moderate/severe? Need for dialysis?^

No general circulatory massage
If dialysis, use caution at access sites
Very gentle session overall if severe

Skin effects? Bruising or bleeding? Itching?

Limit overall pressure (level 1-2 max) if bruising/bleeding
Steady pressure for itching

The Kidney Failure Questions

Osteoporosis?

Gentle pressure and joint mvt. overall, especially at spine

Muscle pain, twitching, cramping?

Full, firm contact; avoid strong joint mvt., care w/position

Neuropathy?

Care w/pressure, joint mvt. at sensation impairment

Anemia?

Gentle pressure, reposition gradually,
slow rise from table
The Liver Questions

Level of liver function? Doctor concerned?

*If low, avoid general “circulatory massage”*

Swelling? Other swollen, congested organs?

*Elevate upper body if necessary*

Skin effects? Bruising or bleeding? Jaundice? Itching?

*Limit overall pressure (level 1-2 max) if bruising/bleeding*

*No general circulatory massage if jaundice*

*Steady pressure for itching*
The Liver Questions

Any effects on nervous system, cognitive functions?

*If cognition affected, direct questions to caregiver, dr.*
*Adapt massage to changes in perception, use simple communication; look for nonverbal cues*

Osteoporosis?

*Gentle pressure and joint mvt. overall, especially at spine*

Effects on kidney function?

*Ask the kidney function ?s*

The Peripheral Artery/Vascular Disease Questions
The Peripheral Artery/Vascular Disease Questions

How does it affect you? Do you experience intermittent claudication?

*Consider walking distance to office, treatment room*

How has it been treated? Angioplasty? Medications (vasodilators, antiplatelets, statins)? Do you take any drugs for intermittent claudication, such as Trental (pentoxifylline)?

*If Trental, limit overall pressure (level 1-3 max)*

*Slow rise from table due to dizziness*

The Stroke Questions

*Ischemic stroke* (Embolic stroke)

*Moving embolus causes damage where it lodges*
The Stroke Questions

Ask about each issue
Observe massage adjustments
Consult physician

The Skin Questions
The Skin Questions

Health of skin?

*If possible skin rash, open skin, skin breakdown:*
- Inspect all skin before making contact
- Avoid contact at open skin
- Avoid pressure, drag at lesions
- Alert client to skin lesions

The Activity & Energy Questions

What is your activity level? Day to day/week to week?
What is your activity tolerance?
Describe your energy level.
Are there any medical restrictions on your activities? If so, describe.
The Heart Attack Questions

When did it occur?
Any complications from it?
  Effects on other organs/tissues?
  Any heart failure?
  Other functions?
How treated?

The Angina Questions

How long since diagnosis?
Triggers? What relieves it?
Stable/unstable? Changes?
Symptoms? Duration?
Other atherosclerosis complications?
Treatment? Effects?
Rescue medication? Where?
The Medication Questions

How do you spell it?
What is it for?
Is it effective?
Side effects?

Medical Treatments
- Diuretics
- Beta-blockers
- ACE inhibitors
- Angiotensin II receptor blockers
- Calcium channel blockers
- Vasodilators

Effects of Treatments
- Hypotension
- Frequent urination
- Headache
- GI upset, heartburn
- Nausea
- Diarrhea
- Swelling

Massage Therapy Guidelines
- End session with stimulating speed, rhythm; slow rise from table
- Schedule massage around meds; easy bathroom access
- Position for comfort; gentle session overall
- Position for comfort; gentle session overall; limit or omit joint movement; even rhythms, slow speeds
- Gentle overall; avoid pressure at abdomen; bathroom access; be alert for dehydration
- Avoid circulatory massage at site, overall
Other Drugs for CHF....

Natriuretic peptides
Digoxin
IV Inotropes (Stimulants)

...tend to be given for acute and severe situations
Tend to be given IV
Are monitored closely for side effects (arrhythmia)

Case Study

• 73 year old woman w/CHF
• Obvious fluid retention
• Legs 1½X normal size
• SOB on standing, walking, talking
• Relieved by rest; recovered quickly
• Several heart meds, diuretics
• Regular physician monitoring
Massage Setup

• Client wanted to undress; needed assistance
• Table set low for ease
• Seated, back support at 75°
• MT pulled up stool

Massage

• Non-circulatory session
• Overall pressure = level 1-2
• MT couldn’t reach client’s back
• Neck, head
• Shoulders, arms
• On legs, just holding, no strokes or movement
Summary

- Follow the fluid—position changes
- Follow the complications
  - Learn more about each
- Adapt to heart disease, angina, heart attack
- Check the skin
- Adapt to medications

Summary

- Follow principles
  - Plaque Problem Principle
  - DVT Risk Principle 1
  - Filter & Pump Principle
  - Vital Organ Principle
- Helpful positioning!
References


• Curtis M. The use of massage in restoring cardiac rhythm. Nursing Times, 1994;90:36-7


Thank you!

Questions?
Just released!
*Medical Conditions and Massage Therapy: A Decision Tree Approach.* Philadelphia: LWW, 2011. Description and link at www.tracywalton.com


**Contact Information**

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Additional Questions on Facebook

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Some questions I cannot answer
Some questions I can answer

Blood Clots, Blood Pressure, and Heart Disease
Common Cardiovascular Conditions and Massage

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1. Blood Clot Symptoms and Massage Therapy
2. Blood Clot Risk and Massage Therapy
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