Angina, Heart Attack, and Massage Therapy

A Webinar with Tracy Walton, MS, LMT

Part 4 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
This webinar: Angina, heart attack

The Web of Cardiovascular Conditions
Cardiovascular conditions often “Run in Packs.”
Learning Objectives

• “The 4 Activity Questions,” and how to use the client’s answers in the massage session
• For safety, how to adjust:
  – massage pressure
  – areas of massage
  – massage intention
• Which spa services are contraindicated in certain cases of heart disease
• “The Medication Principle” and navigating drugs for angina and heart attack

Pretest

1. How are the Activity and Energy Questions used to plan massage for clients with heart conditions?
   a. A person’s exercise tolerance may reflect what their massage tolerance would be
   b. The circulatory effects of exercise indicate circulatory massage could be well tolerated
   c. A client with a good energy level and regular exercise can usually handle a strong massage
   d. All of the above explain how the Activity and Energy Questions may be used in massage planning
Pretest

2. Why should you ask a client with angina pectoris about their use of nitro medication?
   a. So you can locate the medication if the client requests it during the session
   b. To be able to refer them to their doctor for a change in medication
   c. So you can suggest the medication and administer it to the client during an angina episode
   d. To recommend when the client should take it

Pretest

3. Which of the following principles should be used for a client who had a heart attack 4 days previously?
   a. The Plaque Problem Principle
   b. The DVT Risk Principle 1
   c. The Stabilization of an Acute Condition Principle
   d. All of the above should be used with a client who had a heart attack 4 days previously
Pretest

4. Which of the following massage approaches is recommended when a client’s heart is not functioning well as a pump?

a. Over the whole body, use pressure level 3 and above in combination with petrissage
b. When working on the lower extremities, use pressure levels 3 and 4
c. Use “circulatory massage” techniques on the back, legs, and arms
d. Avoid using an overall pressure level 3 and above in combination with effleurage

Pretest

5. Why are steam wraps contraindicated in certain cases of heart disease?

a. General circulatory massage should be used instead
b. Salt, used to exfoliate, may lower blood pressure
c. Raising core temperature could overexert the heart
d. All skin care or body treatments could raise blood pressure
6. Which of the following principles are typically used in massage with clients with heart disease?

a. DVT Risk Principle 1
b. The Activity and Energy Principle
c. The Plaque Problem Principle
d. All of the above are typically used in massage with clients with heart disease

Background

Atherosclerosis
Deposits of plaque and other substances on artery wall causing thickening of wall and narrowing of artery opening

Stenosis
Narrowing of artery by plaque formation
Arterial thrombosis
Formation of thrombus in artery at site of ruptured plaque

Thrombus can...
**Occlude** (obstruct) flow, causing **ischemia** (reduced blood flow to tissue)

**OR...**

...Can loosen and travel downstream

Arterial thromboembolism
Detachment of thrombus from origin, movement to smaller artery and **occlusion** (blocking) of vessel

**OR...**
...Can weaken artery walls, causing aneurysm

Complications of Atherosclerosis
Heart Disease

Any disease of heart walls, valves, muscle, or conduction system.

**Coronary artery disease (CAD)** is presence of atherosclerosis in 1 or more arteries supplying the heart.

Can occlude
Form clots
Form aneurysm

Angina Pectoris

Brief (<15 min) periods of **chest pain or discomfort**
  - May extend to other areas
  - May also experience dizziness, nausea, sweating, shortness of breath, anxiety
Caused by CAD w/occlusion of coronary artery
**Triggers:** stress, exertion, cold weather, smoking, meals
Relieved by rest
Treatment for Angina

Treatments for Heart Disease/Hypertension

Emphasis on vasodilators (nitrates)
  Long-acting nitroglycerin (preventive)
  Short-acting nitroglycerin (rescue)

Unstable Angina

Changes in symptom patterns
- Different triggers
- More easily triggered
- Increase in symptom intensity
- Increase in length of episode
- Increased frequency

Could signal *heart attack*
Heart Attack
(Myocardial Infarction or MI)

Sudden interruption of blood flow to heart muscle

Portion of cardiac muscle becomes ischemic

Dies from lack of oxygen

Heart Attack
(Myocardial Infarction or MI)

Symptoms
- Pain in chest
- Upper abdomen, jaw, back, arm
- Shortness of breath
- Palpitations
- Lightheadedness, faintness, fainting
- Weakness
- Confusion
- Nausea & vomiting

Women more likely to experience different symptoms (jaw pain, back pain, nausea, indigestion)

Can be asymptomatic
Long-Term Treatment for Heart Disease

Eliminate/prevent arterial clots
Lower blood pressure
Help heart pump more efficiently
Avoid straining the heart
Widen arteries to heart

Treatment for Heart Disease

Chemical—Medications

Mechanical—Procedures
Drug Treatments for Heart Disease

Antihypertensives
Antiplatelet medications
Anticoagulants
Statins
  (cholesterol ↓ drugs)
Vasodilators
  (nitrates—nitroglycerin)

Procedures for Heart Disease – Cardiac Catheterization

Coronary angiography/arteriography
Insertion of thin catheter through groin up through aorta to branching of coronary arteries
Injection of dye Followed with imaging to identify occluded artery

Often followed with ...
Procedures for Heart Disease – Cardiac Catheterization

Percutaneous transluminal coronary angioplasty (PTCA), Percutaneous coronary intervention (PCI), “balloon angioplasty”

Often includes...

Procedures for Heart Disease – Cardiac Catheterization

Stent Placement

Stent
Procedures for Heart Disease

**Endarterectomy**
Surgical removal of plaque

**Coronary artery bypass grafting (CABG)**
Surgical grafting of another vessel to substitute for a diseased coronary artery

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Emergency Treatment for Heart Attack

Aspirin to prevent blood clot formation
Beta-blockers to ↓ BP
Nitroglycerin to dilate vessels quickly
Oxygen
Pain meds
Cardiac catheterization
**Treatment for Heart Attack**

**Cardiac Rehabilitation**

Begins in hospital after heart attack
12 weeks + maintenance
   – Education, support
   – Lifestyle changes
   – Supervised CV exercise
   – Supervised strengthening

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**Treatment of Heart Attack**

= **Long-Term Treatment for Heart Disease**

Eliminate/prevent arterial **clots**
Lower **blood pressure**
Help heart pump **more efficiently**
Avoid **straining the heart**
Widen arteries to heart
What about Massage?

General Considerations
Massage Guidelines for Heart Disease

Essentials

*Any Heart Disease (angina or heart attack history)*

Massage Therapy Guidelines

Follow “Plaque Problem Principle”

Massage Guidelines for Heart Disease

Essentials

*Any Heart Disease (angina or heart attack history)*

Massage Therapy Guidelines

Follow “DVT Risk Principles”
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.)

Think about...

How well is the “Pump” working?
Effleurage, Petrissage, or Repeated compressions

Can this heart handle “circulatory massage?”

Pressure level 3 or above

“Circulatory massage”

Heart Disease Continuum

Mild Severe

Stronger Gentler

Massage Therapy Continuum
The Activity and Energy Principle

A client who enjoys regular, moderate physical activity or a good overall energy level can tolerate stronger massage than one whose activity or energy level is low.

The Core Temperature Principle

Avoid spa treatments that raise the core temperature if a client’s cardiovascular system might be challenged by heat, or if there are comparable medical restrictions.
The Stabilization of an Acute Condition Principle

Until an acute medical condition has stabilized...

...massage should be conservative.

The Medication (or Procedure) Principle

Adapt massage to the condition for which the medication (or procedure) is taken or prescribed, and to any side effects.
The Interview and the Massage

When were you diagnosed with heart disease?
What prompted it?

*If heart attack history, ask heart attack questions*
*If angina history, ask angina questions*
*If longstanding, complications more likely*
The Interview and Massage

Any complications, such as angina or heart attack?
Any other cardiovascular conditions?
   *If heart attack history, ask heart attack questions*
   *If angina history, ask angina questions*
   *If stroke, peripheral vascular disease, adapt to condition*
Are your doctors concerned about your heart’s ability to pump?
   *If yes, no overall “circulatory massage”*

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.
**How to use**

The Activity & Energy *Answers*

*If a client’s activity level, activity tolerance, or energy level is low, “dial down” massage*

(Less pressure, slower speed, even rhythms, avoid “circulatory massage” intent)

*If medical restrictions on activities, “mirror” these in your massage.*

(Avoid ↑ core temperature
Avoid “circulatory” intent)

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**The Heart Attack Questions**

When did it occur?
Any complications from it?
  - Effects on other organs/tissues?
  - Any heart failure?
  - Other functions?
How treated?
How to Use
The Heart Attack Answers

Get a sense of how familiar it is

If recent, follow the Stabilization of an Acute Condition Principle
(Work v. gently if recent)

If complications, work more gently overall

Adapt massage to effects of treatments

The Angina Questions

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

- Get a sense of familiarity
- Avoid triggers
- If unstable, or recent changes (frequency, duration, severity, triggers), emergency medical referral
- Adapt massage to other complications
- Adapt to side effects of meds
- Be able to locate rescue meds

The Medication Questions

- How do you spell it?
- What is it for?
- Is it effective?
- Side effects?
How to use
The Medication Answers

Spelling—to look it up
Reason for it—("it’s for ‘X’")
Effectiveness—if ‘X’ is still an issue,
    adapt massage to ‘X’
Side effects—adapt massage to each

Case 1
52-year old male
Mild heart attack
Immediate treatment
Rapid recovery
Case 1

Answers to the heart attack questions

6 mos. ago
No complications
Diet, exercise, statins

Case 1

Answers to the activity questions

Very active
Activity tolerance excellent
Good energy level
No medical restrictions on activity

Massage?
Case 1 Massage

Follow Plaque Problem Principle

Follow DVT Risk Principles

Dr. approved pressure/mvt of legs

No other adaptations

Case 2

77-year old female w/hypertension
Heart attack 3 years ago
Cardiac rehab program
Some return of activity
Walks dog 2x/day, about quarter-mile, slowly
Medications
Case 2

Answers to the heart attack questions

3 years ago
“My heart isn’t what it used to be”—angina
ACE inhibitors
Anti-platelet drugs
Nitrates
Careful diet
Light exercise

Case 2

Answers to the angina questions

3 years ago, since heart attack
Triggered by overexertion, cold
Stable, no changes
Classic symptoms, short duration (5 min.)
Treatment with nitro, used to get headaches, not now
Rescue medication in bag
Case 2

Answers to the activity questions

Activity level: Light activity

Tolerance: Tire more easily

Energy level: Okay

Restrictions: Do not overexert; avoid heat

**Massage?**

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Case 2 Massage

Follow Plaque Problem Principle

Follow DVT Risk Principle 1 indefinitely

No “general circulatory massage,” no ↑ core temp
Case 2 Massage

Adapt to any side effects of meds

(inquire about bruising—level 2 overall; need MD input to go up to 3)

Locate nitro

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
Summary

Massage can be used safely with people with
heart attack history or angina
Adapt the strength of the massage to the
strength of the heart
Adapt to side effects
of medications

Summary

Use lines of questioning
The Heart Attack Questions
The Angina Questions
The Activity
and Energy Questions
The Medication Questions
Summary

Follow principles

Activity and Energy Principle
Core Temperature Principle
Stabilization of an Acute Condition Principle
Plaque Problem Principle
DVT Risk Principles
The CV Conditions “Run in Packs” Principle!

References


References


Thank you!
Questions?

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


Find out more 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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