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
   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

Pretest
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...

**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

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

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

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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, Pettrissage, or Repeated compressions

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
The Interview and 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

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)

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*

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**Case 1**

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

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**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?
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

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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!
Thank you!
Questions?

Contact Information

Tracy Walton at www.tracywalton.com
Reach us at info@tracywalton.com
Additional Questions on Facebook

Facebook.com/DrBenBenjamin

Some questions I cannot answer
Some questions I can answer

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

Other Webinars in this Series
1. Blood Clot Symptoms and Massage Therapy
2. Blood Clot Risk and Massage Therapy
3. Hypertension, Hypotension, and Massage Therapy
4. Angina, Heart Attack, and Massage Therapy
5. Congestive Heart Failure and Massage Therapy
6. Cardiovascular Condition Case Studies

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Email us A.S.A.P. with a couple paragraphs of details about it at info@tracywalton.com
Include your phone number, I may be able to include it in webinar 6 of case studies!
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