Understanding Coronary Heart Disease from TCM and Biomedical Perspectives

Hong Hai
The Renhai Clinic 仁海堂
www.renhai.com.sg
17th May 2015
A talk sponsored by the Council for the 3rd Age

Notes for audience’s reference
All rights reserved – do not cite, copy or forward
Narrowing of the coronary blood vessels

Chest pain (angina)

Death of the heart muscles due to lack of blood following cardiac arrest

May be accompanied by shortness of breath, weakness, and fatigue. In the event that the vessel is blocked due to severe narrowing or a clot, this results in cardiac arrest.
Preventing Heart diseases (TCM)

**Plaque in arteries**

**Reducing risk factors**

- Plaque formation can be slowed down by reducing blood stasis and sufficient heart *qi* for smooth blood flow
- Stroke incidence can be reduced by avoiding hypertension and blood stasis
- Some forms of hypertension can be avoided with preventing endogenous wind and reducing accumulation of phlegm
• Consult a cardiologist if you have symptoms like chest pain on exertion or pain in the jaw radiating to the left arm, or abdominal pain with sweating

• TCM is not adequate for dealing with emergency situations like a heart attack
Risk factors in coronary heart disease (biomedical viewpoint)

• Improper diet, stress, inadequate exercise, smoking, pollution and genetic factors.

• Cholesterol (There are alternative views)

• With ageing, build-up of plaque (deposits) in the arterial walls results in narrowing of arteries and reduced blood supply to heart muscles

• Higher incidence in men who are in late forties; for women, it increases after menopause owing to hormonal changes
TCM view of Coronary Heart disease (CHD)

Two main common underlying “syndromes” of CHDs:

• **Blood stasis**
  – Manifested as impediments to the flow of blood and *qi*
  – Plaques is seen as a form of stasis in TCM

• **Qi deficiency (weakness of ‘heart-qi’)**
  – “Qi is the marshal of blood, blood is the mother of qi”
  – Qi is the principal driving force of the flow of blood. Weak qi will result in poor circulation of blood
Preventing CVDs

Activities and conditions to avoid

(Common to biomedicine and TCM )

• Physical idleness – moving around the house and walking to work is better than sitting around all day
• Obesity
• Diabetes and hypertension
• Prolonged stress
• Shock, fright or anger that triggers coronary spasms or a sudden rise of blood pressure

Eating right

Avoid:

• Excessive fats, especially trans fats, fried foods
• High cholesterol foods ()
• Sugar and low-glycemic index carbos (white rice, sweet fruits, cakes)

Do take foods that:

• Prevent blood stasis (black fungus, yellow ginger, hawthorne)
• Improve qi level and flow
• Reduce dampness and phlegm
• Nourish yin
Western “integrative cardiology”: Combining diet and supplements with medications

- Low fat diet or low carbohydrate diet? (opinions vary)
- Plant-based diet
- Some cases may need to take statins concurrently to reduce inflammation in arterial walls
- Use of supplements like CoQ10, magnesium, D-ribose and L-carnitine
- Not only prevention, but reversals of advanced coronary heart disease has been found with diet alone, even in cases that did not respond to conventional therapies (Esselstyn)
Prevention of Coronary Heart Disease (combining biomedicine and TCM)

- **Prevention** is by regular exercise and a diet rich in fibre, low in saturated and trans fats, and fresh fruit and vegetable to promote endothelial health.
- Recent studies show that pomegranate (石榴) juice improves arterial health; so do hawthorne, bitter gourd, yellow ginger and black fungus.
- Most Western medical cardiologists also believe that lowering of ‘bad’ cholesterol (LDL) would be essential, although this is now being challenged by some new studies.
- **Chinese herbs** that help coronary heart disease are:
  - a) for blood stasis - *danshen* 丹参, *shanzha* 山楂, *hongqumi* 红曲米 (red yeast rice), *chuanxiong* 川芎;
  - b) qi tonics - *xiyangshen* American ginseng, *huaishan* 淮山 and *huangqi* 黄芪, *renshen* 人参, *dangshen* 党参
THE NEW THINKING:
“For two generations, Americans ate fewer eggs and other animal products because policy makers told them that fat and cholesterol were bad for their health. Now both dogmas have been debunked in quick succession.”


2015 Report of the US national committee for dietary guidelines:

1. Lifted the longstanding caps on dietary cholesterol, saying there was “no appreciable relationship” between dietary cholesterol and blood cholesterol. Americans had needlessly avoided egg yolks, liver and shellfish for decades.

2. Cutting fat and cholesterol may have even worsened our health. We ate more grains, pasta and starchy vegetables (carbohydrates) over the past 50 years, cutting fat intake by 25 percent and increased carbohydrates by more than 30 percent.

3. A high-carbohydrate diet rich in sugar and refined grains increases the risk of obesity, diabetes and heart disease — much more so than a diet high in fat and cholesterol.
TCM’s complementary role in managing cardiovascular diseases

- Through the use of herbs and medicated diets, *qigong, taiji* and acupuncture, TCM can work hand in hand with Western medicine to slow down the progression of cardiovascular diseases.

- Healthy lifestyles and emotions, and appropriate diet can greatly increase the efficacy of both Western medicine and TCM treatments.

- Yearly health checks (especially for people who are 40 years and above) can detect early signs of the disease and precautionary steps can be taken.

- Health checks using TCM diagnostic methods can detect sub-clinical conditions (syndromes) 亚健康 and TCM treatments to restore balance can help retard progression of disease.
Chinese herbs and foods that are useful for preventing or slowing the progression of cardiovascular diseases
Herbs for promoting blood flow and removing stasis (活血化瘀)

**Danshen 丹参**
The main herb used in the herbal formulation *fufang danshen diwan* (复方丹参滴丸).

**Chuanxiong 川芎**
*Suxiao jiuxin wan* (速效救心丸) uses chuanxiong 川芎 and bing pian 冰片.

**Gegeng 葛根**
*(Kudzuvine Root)*
Its extract is used in the proprietary medication *yufeng ningxin pian* (俞风宁心片) for the relief of mild angina pains.

Clinical studies indicate that they can dilate coronary arteries and increase blood perfusion to the heart.
Herbs claimed to reduce cholesterol level

Hongqumi 红曲米
(Red yeast rice)

Shanzha 山楂
(Hawthorn berry)

Jiaogulan 绞股蓝

Hawthorn berries also have the action of dilating coronary arteries. German scientists have used extracts from hawthorn leaves and flowers in a dietary supplement called *Crataegutt* for a similar medicinal effect of reducing blood stasis.

The mechanism of red yeast rice to reduce cholesterol level is similar to that of synthetic statins like Lipitor.

Juemingzi 决明子
(Cassia seeds)
Herbs for improving qi

Huangqi 黄芪 (Astragalus)
Xiyangshen 西洋参 (American Ginseng)
Zhigancao 炙甘草 (Liquorice)
Huaishan 山药 (Wild yam)
Renshen 人参 (Ginseng)

All these herbs have the action of restoring the body’s qi level. Most of these herbs are also good tonics for the spleen.

Adequate qi will promote a better blood flow and reduce blood stasis.
Herbs for lowering blood pressure

Tianma 天麻

Gouteng 钩藤

These are the two main herbs used in the prescription *tianma gouteng yin* 天麻钩藤饮 for treating hypertension and managing the initial period after a stroke.

Both herbs have the action of calming liver yang and expel liver wind. Hence, they are also often used to treat headaches and dizziness resulted from hyperactivity of liver yang.
Herbal prescriptions for cardiac conditions
(Use only under proper TCM physician’s advice)

yang xin tang (养心汤) ... improves qi of heart
xuefu zhuyu tang (血府逐瘀汤) ... removes blood stasis
gualou xiebai baijiu tang (瓜蒌薤白白酒汤) ... regulate qi to reduce “phlegm” that can affect heart functions
Food that may be beneficial for cardiovascular health

• Food that are thought to help lower cholesterol levels include black fungus, celery, walnuts, fishes (salmons), cereals with high fibre content (e.g. rye bread, whole grain wheat). (Conclusive clinical evidence is lacking)

• Food which help to control blood pressure within the healthy range are beet juice, spinach, lettuce, cabbage, carrots, bananas, raisins, potatoes, raisins and melons.