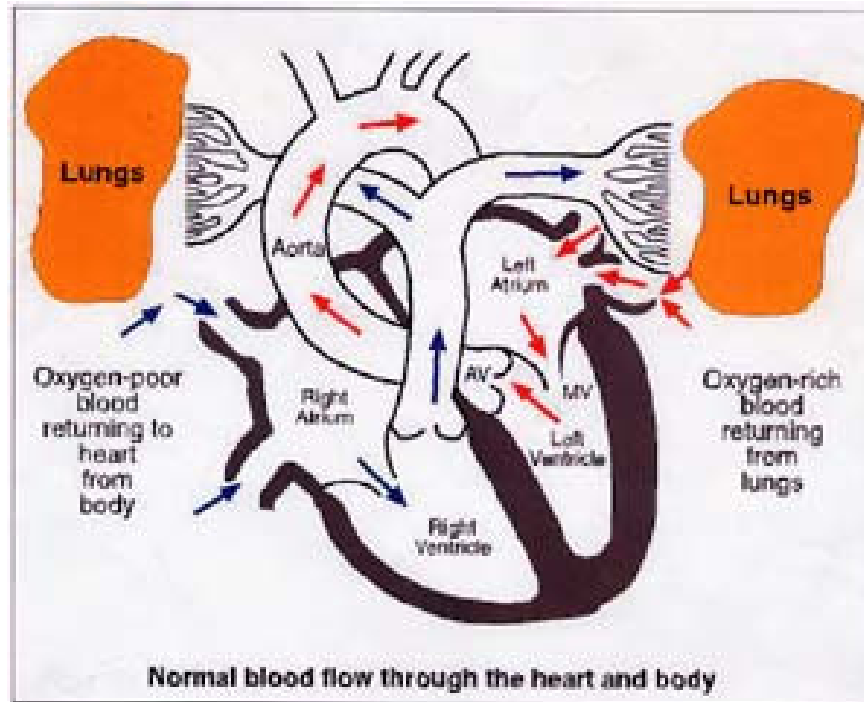


CARDIO-VASCULAR CARTOGRAPHY (CCG)



Non-invasive Heart Disease detection

**The First Step to healing is
EARLY DIAGNOSIS**

*Early Detection
Saves Life*

CARDIOVASCULAR CARTOGRAPHY (CCG)

What is Cardiovascular Cartography?

How is the procedure done?

Who should have CCG done?

Are doctors at Sibia Medical Centre well trained in CCG?

How accurate is CCG?

How costly is CCG?

How to have CCG done?

What information does it provide?

Are we against Angiography?

Make the smart choice.

Your partners in health.

CARDIOVASCULAR CARTOGRAPHY (CCG)

Non-invasive Heart Disease detection

What is Cardiovascular Cartography?

Cardiovascular Cartography (CCG) [older name Realistic Geometric Cartographic Imaging (RGCI)] is a method to measure heart's blood flow, oxygen supply etc using digitally acquired flow turbulence without putting any wires, catheters etc into the body.

How is the procedure done?

Special high precision data accusation electrodes, sensors and transducers measures the heart's parameters which are analysed by sophisticated computerize equipment. The procedure takes about 20 minutes.

Who should have CCG done?

- Everyone over 30 years as screening test for early heart disease detection.
- High risk persons - family history of heart disease, diabetes, high blood pressure, overweight, smokers, high cholesterol levels, Sedentary and Stressful lifestyle, etc.
- Anyone having chest pain to know if it is due to heart or other disease
- Chest pain and Heart Patients - to determine extent of disease
- Follow up after ECP, ACT, Angioplasty and Bypass to assess progress.
- To assess chance of sudden cardiac death.
- To assess if aspirin is needed, if yoga and meditation will help, etc.
- As part of master health check up
- Mass screening for institutions, corporates, insurance companies etc

Are doctors at Sibia Medical Centre well trained in CCG?

They are trained by the Centre for Artificial Intelligence & Non-Linear Studies Laboratory, Bangalore by the research team of CCG and have experience since 2000 when Sibia Medical Centre introduced CCG in North India.

How accurate is CCG?

Mean accuracy for flow reduction measurement is 75% to 81%.

How to have CCG done?

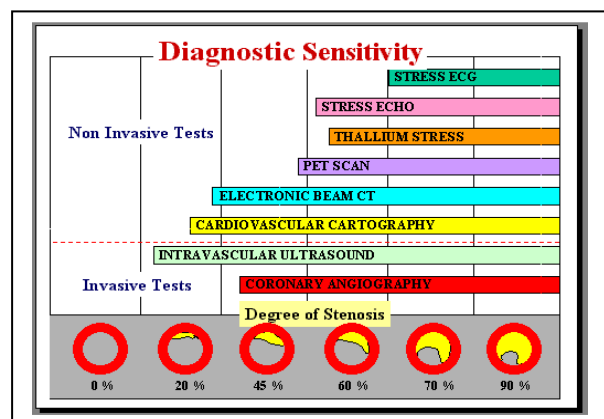
Appointment can be had personally or by phone, fax or email.

On day before the test:

- 1) Do not smoke or consume tobacco or alcohol.

On the day of test:

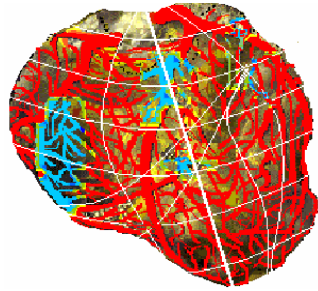
- 1) Come empty stomach or take a cup of milk with two biscuits or a slice of bread three hours before the test. Do not consume tea or coffee before the test.
- 2) Do not take medicines that affect the heart - like sorbitrate, monosorbitrate, beta blockers, calcium channel blockers, vasodilators, anti-hypertensive drugs etc. You may take medicines for diabetes or in emergency situation.



3) Do not undertake long walk, exercise or exertion.

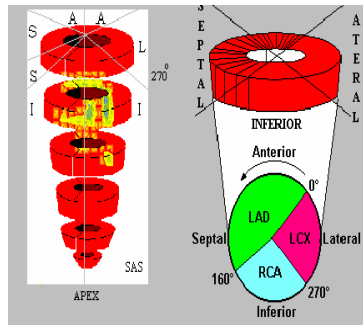
What information does it provide?
 Some of the information obtained is:

REGIONAL BLOOD FLOW



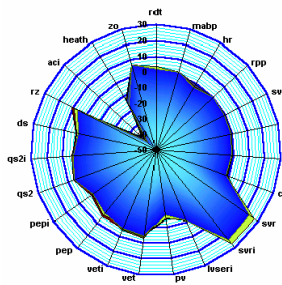
CCG measures Myocardial Blood flow (not blocks)

SLICE MAP



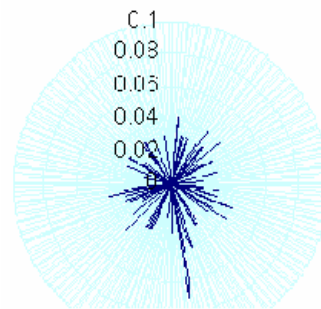
The ischaemic regions are Identified

CARDIOVASCULAR-CARTOGRAM



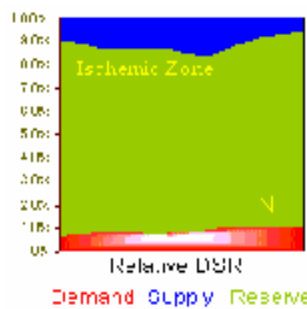
Contractility, Pressure, Volume & Time relationship indicates if changes are physiological, compensatory or pathological

ARRHYTHMOGENICITY



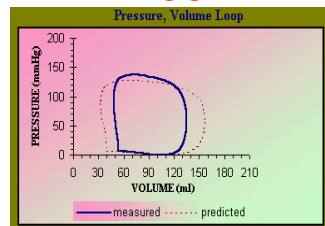
Arrhythmogenicity indicates predisposition to Sudden death

OXYGEN DRS



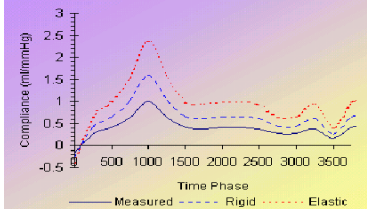
Myocardial Demand, Supply and Reserve is the best indicator of Cardiac Ischaemia

PRESSURE - VOLUME LOOP



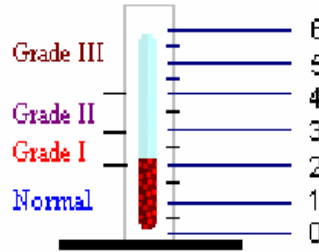
P-V loop is the most sensitive indicator of over all cardiac function to identify early changes.

ARTERIAL COMPLIANCE



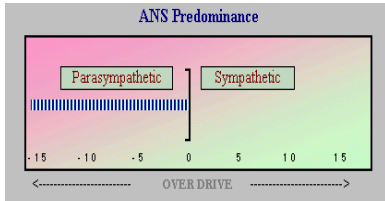
Atherosclerosis occurs as arterial elasticity diminishes with age indicating Endothelial dysfunction (Hyperlipidemia, Diabetics, hypertension, etc)

THROMBUS FORMATION FACTOR



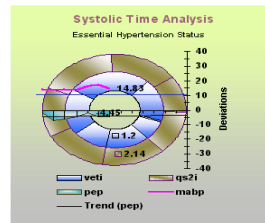
Thrombogenicity is important in thrombus formation

AUTONOMIC NERVOUS SYSTEM



Sympathetic Predominant persons are prone to Cardiac abnormalities including Sudden Death Syndrome

HYPERTENSION STATUS



Systolic Time analysis differentiates White Coat and truly essential hypertension

We believe Angiography should be done to plan Angioplasty or Bypass surgery and not to decide if Angioplasty or Bypass is needed. For thousands of patients who know they will never opt for Angiography or Bypass, Angiography is just spending money and time to expose oneself to its dangers.

– Dr.Sibia



*Decision is your
- make the smart choice*
**You deserve
Only the best**

Because Life is Precious



FACILITIES:

- Master Health Checkup
- External Counter Pulsation (ECP)
- Artery Clearance Therapy (ACT)
- Cardiovascular Cartography (Heart mapping)
- Periphery Artery Disease Treatment
- Cardiac Rehabilitation / Lifestyle Clinic
- Kidney Stone Treatment with rays (ESWL)
- Osteoarthritis Treatment with Cytotron Therapy
- Cancer rehabilitation with Cytotron Therapy
- Nutritional Medicine
- Computerized ECG
- 24 Hours Blood Pressure Monitoring (ABP)
- Computerized Stress / Tread Mill Test
- Laboratory
- Ward - Rooms - Canteen - Library
- Patient Education Brochures (all diseases on request)

Your partners in health
- Dedicated to healthcare without trauma

SIBIA MEDICAL CENTRE

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