

CORONARY ARTERY DISEASE IN THE YOUNG

A REAL THREAT OF THIS MILLENNIUM IN INDIA

AMIRTHA GANESH.B
PROFESSOR AND HEAD/ CARDIOLOGY
MGMCRI

What is it?

- Occurrence of coronary artery disease in people less than 40 to 45 years.(Definition varies between different studies).
- Ranges from Chronic stable Angina to Acute coronary syndrome.

TRENDS IN EPIDIMIOLOGICAL PROFILE

- Coronary heart disease(CAD)-- leading cause of morbidity and mortality, worldwide both in developing as well as developed countries.
- Responsible for one third or more of all deaths in individuals greater than 35 years of age.

TRENDS IN EPIDIMIOLOGICAL PROFILE

- WHO- projected that burden due to CAD is going to increase globally from 47 million disability adjusted life years (DALYs) in 1990 to about 82 million DALYs in 2020.

TRENDS IN EPIDIMIOLOGICAL PROFILE

- Many studies have demonstrated that young CAD contributes to 2% to 6% of all acute coronary event.
- Indian studies revealed the incidence in young CAD is as high as 15-16%.

RISK FACTOR PROFILE

- Prevalence of conventional risk factors like diabetes, hypertension, smoking, dyslipidemia and obesity accounts for about 85% to 90% of premature CAD patients.
- Often have multiple coexisting risk factors contributing to the disease

RISK FACTOR PROFILE

- Most common risk factor associated with young CAD – **Smoking**.
- Prevalence of smoking in younger individuals (≤ 45 years) with CAD – **60% to 90%** as compared to 24% compared to **24% to 56%** in subjects ≥ 45 years.
- Smoking in presence of additional risk factors like DM, HT and obesity predispose to increased risk of future acute coronary events.

RISK FACTOR PROFILE

- Prevalence of- DM/PRE-DM (22% Vs 10%)
 - HT (25% Vs 13%)

higher in young patients with CAD than without CAD.

Recent increase in the prevalence-3 to 4 times

RISK FACTOR PROFILE

- Dyslipidaemia- Different from adults.
- Obesity
- Family history of pre-mature CAD.
- Rare risk factors-Pro-thrombotic state, CETP gene polymorphism, substance abuse, endocrine abnormalities.

RISK FACTOR PROFILE

- Drivers !!
- ? Increased incidence among IT People!
- ? Increased incidence among young doctors!

Problems face in Detection and Treatment

- Atypical symptoms –often ignored and hence detected very late.
- No routine screening done for early identification of risk factors- Often detected during the episode of ACS.
- Often has a stormy post-infarction course.
- Sometimes inclined in alternative treatment.

Angiographically

- Single vessel disease- Usually has good prognosis.
- Minimal CAD- Prognosis affected when they have Left ventricular dysfunction.
- Diffuse TVD many a times non revascularisable

HOW TO PREVENT

- Life style modification:

Diet –

- » What to eat?
- » ? Paleo
- » Breakfast
- » Avoiding late dinner

HOW TO PREVENT

- Exercise –
 - » Start from simple measures
 - » Walk as far as possible
 - » Avoiding lift as far as possible
 - » Brisk walking at least 200 min/week
 - » Other exercise and games

HOW TO PREVENT

- Sustained weight reduction if obese
- Strict control of risk factors – DM, HT
- Screening periodically for risk factors
- Stress management – PPP
- Stop smoking

A word for Young Doctors

- Follow the above advises as strict as possible only then you can advise patients.
- Do not stress yourselves very much especially when career oriented
- To undergo periodic screening for risk factors.

THANK YOU