

Screening and Management of Dyslipidemia

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Screening criteria

- **Category A:** All apparently healthy persons aged between 35 years and above. i. e. a person not known to have any of the following diseases and/or not on regular follow up at a medical/specialist clinic:
 - Cardiovascular disease [coronary heart disease, cerebrovascular disease, peripheral vascular disease]
 - Diabetes, Cancer, Dyslipidemia, Systemic Hypertension, Chronic kidney disease, Chronic liver disease

Screening criteria

- **Category B: Persons aged between 20-34 years having the following risk factors.**
 - Smoking tobacco during the past one year
 - Overweight & obesity ($\text{BMI} \geq 25\text{kg/m}^2$)
 - Abdominal Obesity (waist circumference – male $> 90\text{cm}$, female $> 80\text{cm}$)
 - Persistently Raised BP ($\geq 140/90\text{mmHg}$)
 - Symptoms suggestive of Diabetes Mellitus
 - History of premature cardiovascular disease in first degree relatives (male relative < 55 years, female relative < 65 years)
 - History of Diabetes Mellitus in first degree relatives
 - History of Familial Dyslipidaemia in first degree relatives
- Routine screening for hyperlipidaemia is not indicated in pregnant mothers

Investigations

- Total cholesterol levels
 - Can be performed on a random capillary blood sample using cholesterol strips.
 - Some centers collect blood samples and send to the closest hospital laboratory.
- **If total cholesterol level is equal or more than 240 mg/dl (approx. 6 mmol/l) , a lipid profile needs to be carried out**
- Lipid Profile
 - Require 12-14 hours fasting and a venous blood sample

How to do lipid lowering?

- Non pharmacological management
 - Healthy diet
 - Physical activity
 - Quitting tobacco and alcohol
- Pharmacological management
 - **Statins are the best available lipid lowering medication**

Indications to start statin

- History of established atherosclerotic CVD
- Total cholesterol >300 mg/dl (when LDL is not available)
- Patients with primary LDL-C levels of 190 mg / dl or greater
- Patients age 35 to 75 years of age, with an estimated WHO/ISH (SEAR- B) CVD risk $\geq 20\%$
- For a patient with diabetes

Lifestyle modification

- Heart healthy diet
- Physical activity
- Maintain optimum BMI (18.5 to 23)
- Avoid alcohol consumption
- Quit smoking and other forms of tobacco
- Minimize stress e.g. meditation, Yoga, listening to music, leisure activities
- Sleep at least for 6hrs per day