

What type of dyslipidemia is it?



Natia Vashakmadze MD
30/10/2017

Case of

29 years old slim girl and her 5 years old child with severe hypercholesterolemia



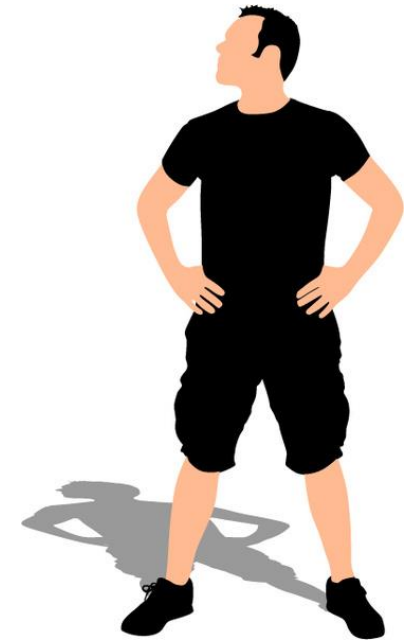
Case of

27 years old young man with severe hypercholesterolemia


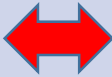




Case of 27 years old young man



- **Complains:** weight gain +5 kg for last 1 year
- **Physically active:** 5000-15000 steps per day (former sportsman)
- **Family history:** Diabetes (Father)
Coronary artery disease (Grandfather)
Stroke (Grand Grandmother)
Multinodular goiter (Mother)
- **Alcohol consumption:** frequent
- **Smoking:** intermittent
- **Diet:** twice a day, main meal in the evening,
Heart unhealthy diet rich with sugar, fat and salt.
- **Abdominal Overweight,** BMI – 28 kg/m², Abdominal circumference >102 cm



Screening tests: **Lipids** (18/07/2017)

Tot. Cholesterol	448 mg/dl 	<200 mg/dl
HDL-c	44 mg/dl 	>45 mg/dl
LDL-c	296 mg/dl 	<100 mg/dl
Triglycerides	912 mg/dl 	<150 mg/dl

Biochemistry: 18/07/2017

ALT	48U/L 	<41U/L
AST	27 U/L	<40 U/L
GGT	74 U/L 	<60 U/L
Crea	0.91	<1.17
eGFR	115	>90
HbA1c	5.3%	4.2-6.0
TSH	1.37	0.4-3.8 mIU/L

Prescription: 21/07/2017

- Lifestyle modification (Healthy diet, stop alcohol consumption and smoking, continue physical activity)
- **Atorvastatin 20** mg 1X day – for long term use
- **Fenofibrate 145** mg 1 X day – for long term use

Control of Plasma Lipids and liver function tests in 2 month

In 2 month: follow up visit 22/08/2017

Tot. Cholesterol	120 mg/dl ✓	<200 mg/dl
HDL-c	47 mg/dl ✓	>45 mg/dl
LDL-c	57 mg/dl ✓	<100 mg/dl
Triglycerides	146 mg/dl ✓	<150 mg/dl

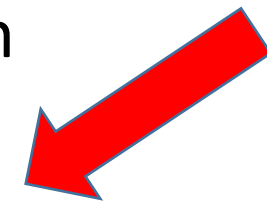
ALT	46 U/L ↑	<41U/L
AST	29 U/L ✓	<40 U/L
GGT	35 U/L ✓	<60 U/L

What to DO?

- Continue ongoing medication and follow up regularly
- Stop Statin, continue Fibrate and follow up in 3 month
- Stop Fibrate, continue Statin and follow up in 3 month
- Stop all medication and follow up in 3 month

What to DO?

- Continue ongoing medication and follow up regularly
- Stop Statin, continue Fibrate and follow up in 2 month
- Stop Fibrate, continue Statin and follow up in 2 month
- Stop all medication and follow up in 2 month



My decision

In 2 month: follow up visit 24/10/2017

Tot. Cholesterol	173 mg/dl ✓	<200 mg/dl
HDL-c	55 mg/dl ✓	>45 mg/dl
LDL-c	90 mg/dl ✓	<100 mg/dl
Triglycerides	275 mg/dl ↑	<150 mg/dl

ALT	70	<41U/L
AST	75	<40 U/L
GGT	120	<60 U/L

Questions to Faculty and the Audience:

- What type of dyslipidemia is it? (alimentary? or genetic?)
- What treatment option would be optimal for this patient? (add fibrate, switch from Atorva to Rosuva? Continue ongoing therapy?)
- For how long should this patient receive statins? (life long? Stop and watch? Other options?)



Case of young 29 years old girl

- **No complains**
- **Family history:** Myocardial infarction – **Mother at age of 32**



Fatal Stoke – Grandfather at age of 71

Hypertension – Father (47 years old) without
established ASCVD

- **Physically active, healthy diet**
- **Underweight:** weight 42 kg, Height – 162 sm, **BMI – 16 kg/m²**
- **Active Smoker** – 1 package /day
- **No alcohol consumption**



Screening test: 21/10/2017

Tot. Cholesterol	410 mg/dl 	<200 mg/dl
HDL-c	46.8 mg/dl	>45 mg/dl
LDL-c	344 mg/dl 	<100 mg/dl
Triglycerides	98.7 mg/dl	<150 mg/dl
Glucose	98 mg/dl	<110 mg/dl

Lipid Results of Parents

Father 47 years old

Tot. Cholesterol	202 mg/dl	<200 mg/dl
HDL-c	44 mg/dl	>45 mg/dl
LDL-c	138 mg/dl	<100 mg/dl
Triglycerides	97 mg/dl	<150 mg/dl

Mother 47 years old

Tot. Cholesterol	350 mg/dl ↑	<200 mg/dl
HDL-c	66 mg/dl	>45 mg/dl
LDL-c	251 mg/dl ↑	<100 mg/dl
Triglycerides	165 mg/dl ↑	<150 mg/dl
HbA1c	98 mg/dl	<110 mg/dl

Fasting lipids of 5 years old Child

Tot. Cholesterol	355 mg/dl ↑	<200 mg/dl
HDL-c	49.1 mg/dl	>45 mg/dl
LDL-c	298 mg/dl ↑	<100 mg/dl
Triglycerides	57.6 mg/dl	<150 mg/dl
Glucose	103.6 mg/dl	<110 mg/dl



Questions to Faculty and the Audience

- What type of dyslipidemia is it?
- What other tests could be done for correct diagnosis?
- Patient was taking 20 mg rosuvastatin but stopped because of the reason that do not want to take a pill for lifelong, what can be done?!
- What treatment option is optimal for 5 years old boy with severe genetic hypercholesterolemia?





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