



# MULTI-FACTORIAL CHYLOMICRONEMIA SYNDROME (MCS)

A more common disorder caused by a combination of genetic susceptibility and secondary factors that lead to persistent or recurrent high triglycerides.

## OVERVIEW



MCS occurs when multiple genetic variants and/or secondary factors impair the body's ability to clear chylomicrons. It is far more common than FCS and can also cause severe triglyceride elevations and pancreatitis.

## KEY FACTS

- ✓ More common than FCS
- ✓ Polygenic (multiple gene variants) + secondary factors
- ✓ Triglycerides often > 1,000 mg/dL, can fluctuate
- ✓ Can occur at any age
- ✓ High risk of recurrent pancreatitis if untreated

## WHAT CONTRIBUTES TO MCS?

- Overweight/Obesity
- Type 2 Diabetes/Insulin Resistance
- High carbohydrate diet
- Alcohol use
- Medications (e.g., estrogen, steroids, retinoids, beta blockers, diuretics)
- Pregnancy
- Other medical conditions (hypothyroidism, kidney disease, etc.)

## SIGNS & SYMPTOMS



- Abdominal pain
- Recurrent pancreatitis
- Nausea, bloating
- Eruptive xanthomas (small bumps on skin)
- Lipemia retinalis (milky or creamy-appearing blood vessels in the eye)
- Fatigue

## HEALTH RISKS



Significant risk of acute and chronic pancreatitis and associated complications, including diabetes and other long-term health issues.

## MANAGEMENT: A MULTI-FACTORIAL APPROACH



### LOW-FAT, LOW SIMPLE CARBOHYDRATE DIET

Focus on whole foods, lean proteins, healthy fats, and high-fiber options.



### AVOID ALCOHOL

Alcohol can significantly raise triglycerides.



### CONTROL BLOOD SUGAR

Manage diabetes and insulin resistance to reduce TG levels.



### ACHIEVE AND MAINTAIN HEALTHY WEIGHT

Even modest weight loss can improve triglyceride levels.



### MEDICATIONS

Fibrates, omega-3s, niacin, or other prescribed therapies may be recommended.



### WORK WITH YOUR CARE TEAM

Endocrinologists, lipid specialists, dietitians, and other providers can help.



## EMERGING THERAPIES

New treatments that target apoC-III (a key regulator of triglycerides) are showing promise. These may be options for individuals with persistent, high-risk chylomicronemia despite lifestyle changes and standard therapies. Ask your healthcare provider if you may be a candidate.



Olezarsen



Plozasiran



Other apoC-III therapies in development



Identifying and addressing all contributing factors is key to lowering triglycerides and preventing pancreatitis.

## IMPORTANT REMINDER

Persistent triglycerides > 1,000 mg/dL require medical attention. Early intervention can prevent serious complications and improve quality of life.