Metabolic Syndrome

Metabolic syndrome is a combination of disorders that increases a patient’s overall risk of cardiovascular disease. Patients diagnosed with this syndrome may have some or all of the following: insulin resistance, central obesity, abnormal lipid levels, hypertension, increased C-reactive protein levels, and increased fibrinogen. Metabolic syndrome may also be called syndrome X, insulin resistance syndrome, or dysmetabolic syndrome.

PLAY PICMONIC

Assessment

Dyslipidemia

Disc-lips

In individuals with metabolic syndrome, a characteristic dyslipidemic profile is observed, notably featuring decreased high-density lipoprotein (HDL) cholesterol levels and elevated triglyceride concentrations. Collectively, the combination of low HDL cholesterol and elevated triglycerides in metabolic syndrome enhances the risk of atherosclerotic cardiovascular disease

Central Obesity

Center Obese

Central obesity is defined as a male waist greater than 40 inches in diameter, or a female waist greater than 35 inches in diameter. Central obesity contributes to a diagnosis of metabolic syndrome.

Insulin Resistance

Insect-syringe swatted by Resistance

Insulin resistance, related to excessive abdominal fat, may be present in patients with metabolic syndrome. A fasting glucose of 100 mg/dL or higher is indicative of insulin resistance.

Hypertension

Hiker-BP

Patients are considered hypertensive when systolic blood pressure is greater than 130 mmHg, or when diastolic blood pressure is greater than 80 mmHg. While in normal people without other underlying health issues this is not always a cause for concern, diastolic pressures should be monitored to make sure they do not go above 90 mmHg on two or more subsequent clinical encounters.

Increased C-Reactive Protein (CRP)

Up-arrow C-reactive Mr. Protein

C-reactive protein levels are typically elevated in patients with metabolic syndrome. The body is in a proinflammatory state, due to the increased release of inflammatory cytokines by excess fat tissue in the body.

Increased Fibrinogen

Up-arrow Fiber-jam

Fibrinogen is necessary for blood clot formation; however, when levels of fibrinogen are increased, the patient is said to be in a prothrombotic state. Fibrinogen levels are typically elevated in patients with metabolic syndrome, due to the increased release of inflammatory cytokines by excess fat tissue in the body.

Considerations

Increased Risk Cardiovascular Disease

Up-arrow Risk Heart Diseased

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