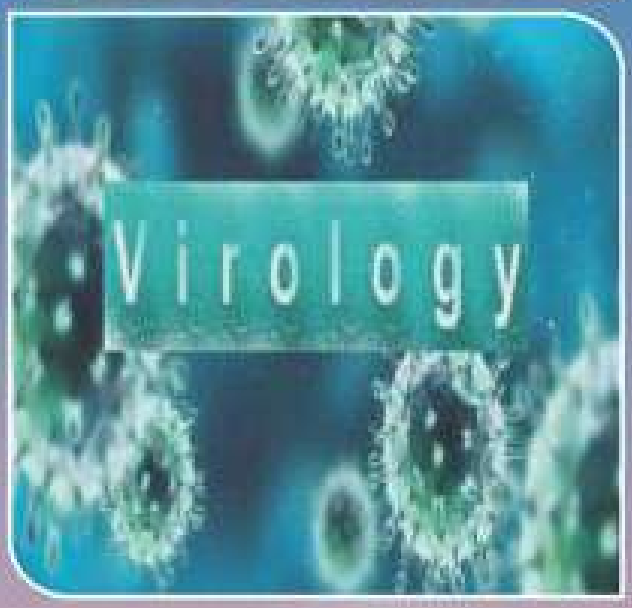
COVID-19

The Clinical Management



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Recommendation given in the chapter for clinical management of COVID-19 through chapters are based on guidelines issued by WHO/CDC/ICMR/AYUSH/NIH. Before applying recommendations or clinical management to the disease, registered medical practioner must be consulted.

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Chapter 10

COVID-19: THE CLINICAL MANAGEMENT OF PATIENT WITH HYPERTENSION

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Chapter 11

COVID-19:THE CLINICAL MANAGEMENT OF METABOLIC SYNDROME

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Chapter 12

COVID-19: THE CLINICAL MANAGEMENT WITH BLOOD PLASMA THERAPY.

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Chapter 13

COVID-19:THE CLINICAL MANAGEMENT OF MILD TO MODERATE ILL PATIENTS

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Chapter 11

COVID-19:THE CLINICAL MANAGEMENT OF METABOLIC SYNDROME

Abstract

Coronavirus disease-19, from a genetic perspective, is related to the pandemic era that originated in 1918. Likely a similar pattern may be visible in future pandemic and metabolic syndrome to have a major impact on the adversity of the pandemic. Metabolic syndrome is the existence of 3 or more elements among obesity, elevated triglyceride levels, squat levels of high-density lipoprotein, high blood pressure, high fasting glucose levels, and chronic inflammation. Deficiencies in adaptive immunity categorized by a delayed activation of T helper 1 cell (early phase) and hyperinflammatory response (late phase) occur in diabetic patients. Increased oxidative stress and metabolic malfunctioning result in deoxyribonucleic acid damage and also diabetic cardiomyopathy. Obesity and severe acute respiratory syndrome coronavirus-2 have an identical pathway for the origin of inflammation, this exacerbates respiratory infection in the obese. Cytokine storm plays a crucial role in coronavirus disease-19, middle east respiratory syndrome coronavirus, and severe acute respiratory syndrome coronavirus pathogenesis. Chronic inflammation and oxidative stress in the respiratory system are also linked with immune dysfunction. Thus, metabolic syndrome, past as well as ongoing pandemic share inflammation in conjugation. Caloric restriction may be beneficial in reducing oxidative damage, elevating insulin sensitivity. Metabolic syndrome management requires diversified methodologies involving diet modification, exercise, prophylactic agents, therapeutic options, and the most important mass awareness. This will be highly beneficial for prevention as well as diminishing the severity of the pandemic occurring in the future.

Keyword: *PANDEMIC, METABOLIC SYNDROME, DIABETES, OBESITY.*