

DISEASES AND ITS TREATEMENTS

Influenza (Flu)

Treatment for influenza includes rest, increased fluid intake, and over-the-counter medications such as acetaminophen or ibuprofen to reduce fever and pain. Antiviral drugs like oseltamivir (Tamiflu) and zanamivir (Relenza) may be prescribed if taken within 48 hours of symptom onset. Flu vaccines help prevent infection.

Pneumonia

Treatment for pneumonia depends on the cause. Bacterial pneumonia is treated with antibiotics, while viral pneumonia may require antiviral drugs in some cases. Supportive treatments include rest, hydration, fever-reducing medications, oxygen therapy (in severe cases), and hospitalization if breathing difficulties occur.

Tuberculosis (TB)

Tuberculosis is treated with a long-term antibiotic regimen that includes isoniazid, rifampin, ethambutol, and pyrazinamide for at least six months. Directly Observed Therapy (DOT) is recommended to ensure adherence to the treatment plan. Drug-resistant TB may require stronger antibiotics for a longer duration.

Dengue Fever

There is no specific antiviral treatment for dengue fever. Management focuses on supportive care, including hydration, rest, and pain relievers like acetaminophen (paracetamol). Aspirin and ibuprofen should be avoided due to the risk of bleeding complications. In severe cases, hospitalization and intravenous fluids may be required.

Diabetes

Diabetes treatment includes lifestyle changes such as diet modification, regular exercise, and weight management. Type 1 diabetes requires insulin therapy, while Type 2 diabetes may be managed with oral medications like metformin or insulin if needed. Continuous monitoring of blood sugar levels is essential to prevent complications.

Hypertension (High Blood Pressure)

Treatment involves lifestyle modifications such as reducing salt intake, increasing physical activity, managing stress, and maintaining a healthy diet. Medications like diuretics, ACE inhibitors, beta-blockers, and calcium channel blockers may be prescribed based on severity and patient history.

Heart Attack (Myocardial Infarction)

Immediate treatment includes aspirin, nitroglycerin, and oxygen therapy. Medical interventions may involve thrombolytic (clot-dissolving) drugs, angioplasty, and stent

placement. Long-term management includes lifestyle changes, medications like statins and beta-blockers, and, in some cases, bypass surgery.

Asthma

Treatment for asthma includes quick-relief inhalers (bronchodilators like albuterol) to relieve symptoms during an attack and long-term control medications such as inhaled corticosteroids and leukotriene modifiers to prevent flare-ups. Avoiding triggers like allergens, smoke, and pollution is also crucial.

COVID-19

Mild COVID-19 cases require symptomatic treatment, including rest, hydration, and fever management with acetaminophen. Antiviral drugs such as Paxlovid or Remdesivir may be used in severe cases. Oxygen therapy, corticosteroids, and ventilatory support may be required for critical patients. Vaccination helps prevent severe illness.

Migraine

Treatment includes pain relievers like ibuprofen, triptans (e.g., sumatriptan), and preventive medications such as beta-blockers, antidepressants, and anti-seizure drugs. Avoiding triggers like stress, certain foods, and sleep disturbances is crucial. Lifestyle modifications, relaxation techniques, and staying hydrated also help manage migraines.

Alzheimer's Disease

While there is no cure, medications like donepezil, rivastigmine, and memantine help manage symptoms and slow disease progression. Cognitive therapies, memory exercises, and a structured environment support patients. Research is ongoing for new treatments, including monoclonal antibody therapies.

Stroke

Immediate treatment depends on the type of stroke. For ischemic stroke, clot-busting medications like tPA (tissue plasminogen activator) must be administered within hours of onset. For hemorrhagic stroke, controlling blood pressure and possible surgery to stop bleeding may be required. Rehabilitation, including physiotherapy and speech therapy, is crucial for recovery.

Arthritis

Treatment depends on the type of arthritis. Nonsteroidal anti-inflammatory drugs (NSAIDs), corticosteroids, and disease-modifying antirheumatic drugs (DMARDs) like methotrexate are used for rheumatoid arthritis. Lifestyle modifications, physical therapy, and joint replacement surgery may be required in severe cases.

Hepatitis B

Acute hepatitis B usually resolves on its own with supportive care, including rest and hydration. Chronic hepatitis B may require antiviral medications like tenofovir and entecavir to slow liver damage. Regular monitoring and liver function tests are essential. Hepatitis B vaccination helps prevent infection.

Kidney Failure

Treatment depends on the severity. Early-stage kidney disease can be managed with blood pressure control, dietary changes, and medications. Advanced kidney failure may require dialysis (hemodialysis or peritoneal dialysis) or a kidney transplant. Lifestyle changes, such as a low-sodium and low-protein diet, help slow progression.