Diabetology

1. Blood Sugar Management

• Type 1 Diabetes:

- o Insulin therapy (basal, bolus, or pump-based systems).
- Continuous glucose monitoring (CGM).

Type 2 Diabetes:

- Oral antidiabetic drugs (e.g., Metformin, Sulfonylureas, DPP-4 inhibitors, SGLT-2 inhibitors).
- o Injectable medications (e.g., GLP-1 receptor agonists, insulin).

• Gestational Diabetes:

o Lifestyle modifications and insulin or oral medications if necessary.

Pre-Diabetes:

o Prevention strategies with diet, exercise, and weight loss programs.

2. Diabetes Education and Counseling

Dietary Counseling:

o Personalized meal planning (low glycemic index diets).

• Exercise Guidance:

o Developing safe and effective physical activity plans.

• Self-Monitoring Training:

o Teaching patients how to monitor blood sugar levels.

• Lifestyle Modification:

Smoking cessation and stress management techniques.

3. Prevention of Complications

Diabetic Neuropathy:

- o Pain management (e.g., pregabalin, gabapentin).
- Foot care and prevention of foot ulcers.

• Diabetic Retinopathy:

Regular eye screenings and treatment with laser therapy or injections.

• Diabetic Nephropathy:

Blood pressure and glucose control.

o ACE inhibitors or ARBs to protect kidney function.

• Cardiovascular Disease:

o Statins, antiplatelet therapy, and hypertension management.

• Diabetic Foot Care:

o Wound management, offloading techniques, and amputations if necessary.

4. Insulin Management

• Initiation and Adjustment:

o Starting insulin therapy and titrating doses based on blood sugar levels.

• Insulin Pump Therapy:

o Advanced options for patients requiring intensive insulin regimens.

Training:

o Proper injection techniques and site rotation education.

5. Diagnostic Services

Blood Sugar Testing:

Fasting blood glucose and postprandial glucose tests.

• HbA1c Testing:

o Long-term glucose control monitoring.

• Continuous Glucose Monitoring (CGM):

o Real-time tracking of blood sugar trends.

• Lipid Profile:

Monitoring cholesterol and triglycerides.

• Kidney Function Tests:

o Monitoring for early signs of diabetic nephropathy.

• Foot Screening:

Assessment for neuropathy and circulation issues.

6. Special Diabetes Programs

• Intensive Diabetes Management (IDM):

o Tailored therapy for uncontrolled diabetes.

• Weight Management Programs:

o For overweight or obese patients with diabetes.

• Bariatric Surgery Support:

o Pre- and post-operative care for diabetes remission.

7. Emergency Diabetes Care

Diabetic Ketoacidosis (DKA):

o Fluid replacement, insulin therapy, and electrolyte management.

• Hyperosmolar Hyperglycemic State (HHS):

o Intensive hydration and blood sugar correction.

• Hypoglycemia Management:

o Quick glucose replacement and prevention strategies.

8. Advanced Diabetes Therapies

• Artificial Pancreas Systems:

o For patients needing tight glucose control.

• Islet Cell Transplantation:

o For select cases of Type 1 Diabetes.

9. Pregnancy and Diabetes Management

• Pre-Conception Counseling:

o Optimizing blood sugar before pregnancy.

• Gestational Diabetes Care:

o Monitoring and management during pregnancy.

• Postpartum Diabetes Screening:

o Testing for persistent diabetes after delivery.

10. Research and Clinical Trials

Participation in New Drug Trials:

o Access to cutting-edge therapies under supervision.