

GOVERNMENT OF NATIONAL CAPITAL TERRITORY OF DELHI
DIRECTORATE GENERAL OF HEALTH SERVICES
NATIONAL PROGRAM FOR PREVENTION AND CONTROL OF
NON-COMMUNICABLE DISEASES (NP-NCD)

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STANDARD TREATMENT PROTOCOL FOR TYPE 2 DIABETES MELLITUS

SYMPTOMS		DIAGNOSIS				TREATMENT					
<p>May be asymptomatic</p> <p>A. Osmotic symptoms ie polyuria, polydipsia and polyphagia</p> <p>B. Weight Loss</p> <p>C. Non-healing wounds</p> <p>D. Recurrent infections</p> <p>E. Blurring of vision</p> <p>F. Paresthesias</p>		<p>FPG \geq 126mg/dl after 8hr fasting</p> <p>OR</p> <p>2h PG \geq 200 mg/dl during OGTT</p> <p>OR</p> <p>HbA1c \geq 6.5% *</p> <p>OR</p> <p>Diabetes symptoms A/B only + random PG \geq 200 mg/dl</p>				<p>Lifestyle modification (LSM)</p> <ul style="list-style-type: none"> Dietary modification (LSM) Physical activity Avoidance of tobacco and restriction/ avoidance of alcohol 					
		<p>PREDIABETES</p> <p>Impaired fasting glucose FPG 110-125 mg/dl</p> <p>Impaired glucose tolerance: 140-199mg/dl</p> <p>HbA1c 5.7-6.4% *</p>				<p>If glycemic targets not met after 1 month of LSM:</p> <ul style="list-style-type: none"> Start metformin 500mg once or twice a day (unless contraindicated- serum creatinine $>$1.5 mg/dl or eGFR$<$45ml/min) Reassess after 1 month 					
<p>CO-MORBIDITIES</p> <ul style="list-style-type: none"> Hypertension Dyslipidemia CAD CKD 		<p>ASSESS</p> <p>BMI</p> <p>Waist Circumference</p> <p>BP</p> <p>Peripheral pulses</p> <p>Pin-prick sensation, monofilament test, vibration, DTR</p> <p>Skin, oral cavity, foot</p> <p>Fundus (dilated) examination</p>				<p>If glycemic targets not met after 1 month :</p> <ul style="list-style-type: none"> Increase dose of metformin to 500mg thrice daily after meals or 1000 mg twice daily (if tolerated) Reassess after 3 months 					
<p>INVESTIGATION</p> <ul style="list-style-type: none"> Fasting and post meal blood glucose KFT Fasting lipid profile Urine routine examination LFT HbA1c (if available) Urine albumin creatinine ratio (if available) Others like ECG, Echo, USG abdomen as indicated 		<p>TARGETS</p> <p>Glycemic targets</p> <ul style="list-style-type: none"> Fasting glucose: $<$115 mg/dl Post-meal glucose: $<$160mg/dl HbA1c (if available) \leq 7.0% (except in elderly or those with significant comorbidities) <p>Non-Glycemic targets</p> <ul style="list-style-type: none"> BP=140/90 (130/80 in CKD) LDL: $<$100mg/dl ($<$70mg/dl in CAD) 				<p>If glycemic targets not met after 3 month on metformin :</p> <ul style="list-style-type: none"> Obese patients-Add vildagliptin 50mg twice daily after meals Non-obese/Lean patients (BMI$<$23kg/m²)- Add Glimepride 1 mg once daily before breakfast. Reassess monthly with 1 mg increments till targets are met or a dose of 4mg once daily is reached Reassess after 3 months 					
<p>MONITORING</p> <ul style="list-style-type: none"> Fasting and postprandial glucose once monthly HbA1c every 6-12 months (if available) <p>Annual Monitoring:</p> <ul style="list-style-type: none"> Urine albumin creatinine ratio (if available) or urine routine dilated fundoscopy foot examination 		<p>REFERRALS</p> <ul style="list-style-type: none"> Endocrinology (if available)/Medical specialist: for uncontrolled hyperglycemia Ophthalmology: at initial evaluation and every year Nephrology (if available)/Medical specialist: for deranged renal function Cardiology (if available)/Medical specialist: for CAD/HF/arrhythmia 				<p>If glycemic targets not met after 3 month on vildagliptin 50mg BD or Glimepride 4 mg OD</p> <p>Add third drug:</p> <ul style="list-style-type: none"> Those on metformin + glimepride : Add vildagliptin 50mg twice daily after meals Those on metformin + vildagliptin: Add Glimepride 1 mg once daily before breakfast. Reassess monthly with 1 mg increments till targets are met or a dose of 4 mg once daily is reached Reassess after 3 months 					
						<p>If glycemic targets not met after 3 month on three drugs:</p> <ul style="list-style-type: none"> Consider referral to Medical specialist/ higher centers for basal insulin initiation and further intensification of insulin regimen wherever needed 					

* When performed by a standardized method which is certified by NGSP and traceable to the DCCT reference assay