



# Name: DR. R. RAJASEKAR

Qualification: MD., FICP., FACP(USA)., FRCP(Glasgow), FRCP., (IRELAND)

**Designation: CONSULTANT PHYSICIAN & DIABETOLOGIST  
HEART & DIABETES THERAPY CENTRE  
Place : KUMBAKONAM**

- 1) ACADEMIC: PUBLISHED MANY PAPERS IN MEDICAL JOURNALS AND WRITTEN CHAPTERS FOR TEXTBOOK OF MEDICINE – API/HYPERTENSION SOCIETY OF INDIA.
- 2) WRITTEN BOOK ON “MY MNEMONICS IN MEDICINE”.
- 3) ONE OF THE AUTHORS OF YEAR BOOK OF MEDICINE 2018.
- 4) EDITOR OF ICP MONOGRAPHS-- ON ANEMIA, HISTORY TAKING & GENERAL EXAMINATION IN CLINICAL MEDICINE, APPROACH TO FLUID , ELECTROLYTE AND ACID BASE DISTURBANCES-CLINICAL APPRAISAL AND HANDLING” ,
- 5) DELIVERED MANY LECTURES IN API AND IMA.
- 6) GOT DISTINCTION IN SEVERAL SUBJECTS DURING MBBS.
- 7) REVERED TEACHER AWARD BY EAST ZONE API-ASSAM 2017
- 8) DELIVERED PROF.DR SESHAIYA ORATION AT DIASICON 2018 CHENNAI.
- 9) DELIVERED DR.S.ARHUL RAJ ORATION in Tamil Nadu State IMA Conference TIMACON-8-Dec.2018- -Lifestyle diseases-- Genesis, Upshots, Features and Hegemony.
- 10) Delivered Major.Dr.Parthasarathy Oration in IMA.Kodambakkam-Chennai-Management of Hypertension-Pellucid Approach
- 11) Invited as Faculty by International Forum -Glasgow-2019.
- 12) GOT BEST DOCTOR AWARD BY TAMILNADU GOVT AND DOCTORS DAY AWARD FROM STATE IMA.
- 13) PROFESSIONAL EXCELLENCE AWARD BY ROTARY INTERNATIONAL.
- 14) MARY JOHN AWARD FROM USA FOR PROFESSIONAL EXCELLENCE.
- 15) FACULTY FOR CARDIO DIABETIC COURSES - PHFI.
- 16) NATIONAL GOVERNING BODY MEMBER- API.
- 17) TREASURER - AMERICAN COLLEGE OF PHYSICIANS- INDIA CHAPTER
- 18) PRESIDENT-ELECT-CLINICAL CARDIODIABETIC SOCIETY OF INDIA.
- 19) EDITOR IN CHIEF-INTERNATIONAL JOURNAL OF CARDIODIABETOLOGY.

# DIABETES

- . Diabetes is a hypersecretory senescent state due to glucotoxicity, lipotoxicity, oxidative stress, Amylin deposition, Insulin receptor substrate, resulting--> Apoptosis Diet.
- I. Insulin.Incretin Mimetics-GLP 1 ANALOGS
  - A.Alpha glucosidase Inhibitors. Achieve HbA1C<7%
  - B.BP control
  - E. EXercise.
    - FITT Principle. F.Frequency.I.Intensity. T. Type of Exercise. T. Timing. Life Style Modifications
  - T.To prevent Macro/Microvascular Complications
  - E. Euglycemia to be achieved by effective control of blood glucose thereby achieving normal HbA1C<7%
  - S. Secretogogues--Sulphonylureas, Nonsulphonylureas-Glinides Sensitisers-Insulin-Guanides-Metformin. Glitazone -Pioglitazone.
  - Suppression of DPP4-Gliptins SGLT2 Inhibitors.  
Gliflozins
  - Sympatholytic D 2 Dopaminergic agonist, ,BROMOCRIPTINE  
Stimulating Insulin sensitivity. HCQ

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# CLUSTERING OF DM

- **Cluster 1: Severe autoimmune diabetes (SAID) Cluster 2: Severe insulin-deficient diabetes (SIDD) Cluster 3: Severe insulin-resistant diabetes (SIRD) Cluster 4: Mild obesity-related diabetes (MOD) Cluster 5: Mild age-related diabetes (MARD)**
- **S(AID)-Cluster 1**
- **S(IDD)-Cluster 2**
- **S.(IRD)-Cluster 3**
- **M(OD)-Cluster 4**
- **M(ARD)-Cluster 5**

# DM MANAGEMENT

- **D. Diabetes. type 2 management's key factor is by Lifestyle management**
- **M. Metformin remains the preferred first-line agent**
- **M. Medical nutrition therapy, including healthy eating advice and strategies, should be offered to all patients. Increased and regular physical exercise is recommended for all people with type 2 diabetes.**
- **A. A1c.HbA1c to increase microvascular benefits is 7 per cent or less (53 mmol/mol) for most nonpregnant adults with sufficient life expectancy**
- **N. Nephrological Disorders-For patients with chronic kidney disease, a sodium-glucose cotransporter 2 (SGLT2) inhibitor with proven benefits is recommended**
- **A. Approach of cost effectiveness is essential**
- **G. Glucagon-like peptide 1 (GLP-1) receptor agonists are now recommended as the first injectable medication prior to insulin for most adults with type 2 diabetes who need the greater blood glucose-lowering of an injectable medication.**

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# DM MANAGEMENT

- **E. Educating patients on DM management.**
  - **All patients should be offered access to ongoing Diabetes Self-Management Education and Support (DSMES) programs in order to help patients cope with the daily challenges of living with diabetes, which can increase adherence to the diabetes care plan. DSME/S programs provide essential information to increase th patient's ability to successfully and effectively manage their diabetes every day**
- **M. Metabolic surgery for adults with type 2 diabetes and either 1) BMI 40 (BMI 37 for people of Asian ancestry) or 2) BMI 35 but <40 (BMI 32.5 or <35 for people of Asian ancestry) who are not able to achieve sustainable weight loss through intensive, non- surgical programs. For BMI 30-35, metabolic surgery may be considered.**

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# ANTI DIABETIC AGENTS

- OHA (ORAL Hypoglycemic Agents)----> G ADA -  
(Oral & Injectable)----> I
  - G
- 1. G-GLIBENCLAMIDE GLIPIZIDE  
GLICLAZIDE GLIMEPERIDE
- 2. Glinides – Repaglinide, Nateglinide.
- 3. G-GUANIDES -METFORMIN
- 4. G-GLITAZONE PIOGLITAZONE
- 5. G-GLUCOSIDASE INHIBITOR - ALPHA ACARBOSE
  - MIGLITOL VOGLIBOSE
- 5. GLIPTINS -.Sitagliptin, Vildagliptin, Saxagliptin, Linagliptin, Teneagliptin.
- 6. G-GLUCOSE TRANSPORTER. SODIUM INHIBITOR-SGLT --GLIFLOZIN .-Dapa,  
Empa, Cana, Remo..
- 7. G- Galactation Suppressant ,a sympatholytic D2 Dopaminergic agonist,
  - ,BROMOCRIPTINE
- 8) G- Glucose level reduction – Improving insulin sensitivity/ enhancing insulin  
secretion/ suppressing insulin resistance- Hydroxy Chloroquine.

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