In Diabetes

- 1. Diabetic Autonomic Neuropathy usually occurs in Type1 and Type2 DM of longer duration but it also occur in 9% of prediabetic
- 2. Earliest features of Diabetic cardiac autonomic Neuropathy is Heart rate variability with deep breathing, valsalva, standing.
- 3. Resting tachycardia is due to vagal denervation in late stages.
- 4. Fixed heart rate during exercise will limit the exercise capacity
- 5. Fatal arrhythmia can occur even without ischemia is characteristic of Diabetic Autonomic Neuropathy
- 6. Nocturnal sweating even without hypoglycemic is a feature of Automatic Neuropathy
- 7. Upper body hyperhidrosis and lower body anhidrosis is characteristic of Diabetic Autonomic Neuropathy
- 8. Lower body anhidrosis leads to dry skin and fissures which may be nidus for infections
- 9. Dependent edema in long-standing diabetes may be due to autonomic Neuropathy secondary to sympathetic denervation of Arteriovenous communications.
- 10. Postprandial dyspepsia and fullness is feature of Diabetic Autonomic Neuropathy of GIT gold standard diagnostic test is scintigraphy of digestible solids every 15 minutes for 4 hrs.

Effective alternative test is 13C octanoic breath test.

- 11. Erectile dysfunction in diabetes occurs 50 % in men and 30% in women due to autonomic Neuropathy and endothelial dysfunction
- 12. Sexual stimulation is necessary for the effective Tumescence following PDE 5 inhibitors.
- 13. Apomorhine centrally acting drug acts at hypothalamus by increasing dopamine levels (D1& D2) agonist useful for Erectile dysfunction.
- 14. Postural hypotension without appropriate tachycardia is feature of Diabetic Autonomic Neuropathy
- 15. Aim of the treatment is minimising the postural symptoms not achieving normal blood pressure
- 16. Treatment of postural hypotension is Head end elevation , gradual rising from bed , pressure stockings for legs and Abdomen. Fludrocortisone 100micgm qid , Midodrine 2.5 to 10 mg/day, Droxidopa is appo y FDA.

- 17. Clonidine is used for diabetic diarrhoea may reverse adrenergic nerve dysfunction
- 18. Gastroparesis in Diabetes is due to relaxation of proximal stomach and abnormal activity of Gastric pacemaker situated at pylorus of the stomach.
- 19. Apart from prokinetics like metoclopromide, lesuride, cisapride in diabetic gastroparesis. New drug such as SEPIAPTERIN accelerate gastric emptying
- 20. Pupils in Diabetic Autonomic Neuropathy Decreased pupil size, Resistance to mydriatic, delayed or absence response to light.
- 21. High resolution infrared cameras to measure pupillary diameter in dark.
- 22. ECG finding in cardiac autonomic Neuropathy is QT prolongation and varying RR intervals with respiration

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Diabetes has an impact of both Micro and Macrovascular Complications. But Obesity Studies reveal Maximum body mass index before onset of type 2 diabetes(MBBO) is independently associated with advanced diabetic complications. MBBO is useful to estimate a patient's insulin secretion capacity.

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Mendelian randomization (MR) study reveals causal role of liver fat and pancreas volume in risk of type 2 diabetes and no causal associations with type 1 diabetes. Diabetes Care dc211262

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