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## The Real Paradigm Shift in Management of T2DM

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The year 2018 can be seen as the time from where our management of type 2 diabetes mellitus has undergone a sea change. Now we will be addressing this pandemic of T2DM with a different angle.

We know that 90% of patients with T2DM are overweight or obese. We also know that as weight, body mass index and waist hip ratio have increased, the world has seen a corresponding rise in the number of T2DM.

Anecdotal reports on weight loss leading to excellent control of T2DM have been published from time to time. But there was no concerted effort to pursue in this direction. Has life style modification to reduce weight been under stressed? Or have we not realised its importance? The answer to both, it seems, is in the affirmative and that should be an eye opener for all of us.

We can also deduce from studies on the sodium-glucose co-transporter 2 inhibitors (SGLT2i) that the cardiovascular benefit, as against safety only, is mainly because of the loss of glucose and sodium these induce leading to weight loss. A few kilograms of loss translates into a better metabolic profile of the patient. And then we got the ground breaking studies on glucagon like peptide 1 receptor agonists (GLP1-RA) liraglutide and dulaglutide. The Leader Trial and REWIND Trial<sup>(1,2)</sup> amplified the concept of weight loss and the benefits associated with it. Full details of the REWIND study will be reported at the American Diabetes Association Scientific Sessions in San Francisco in 2019.

But the study which has proved to be the game changer is the DiRECT Trial conducted in Scotland and the Tyneside region of England<sup>(3)</sup>. On a very low calorie diet, after stopping all treatment for DM and hypertension, the results were astonishing. At 12 months, they recorded weight loss of 15 kg or more in 36 (24%) participants in the intervention group and no participants in the control group ( $p < 0.0001$ ). Diabetes remission was achieved in 68 (46%) participants in the intervention group and six (4%) participants in the control group (odds ratio 19.7, 95% CI 7.8–49.8;  $p < 0.0001$ ).

That for me is the real paradigm shift in the management of patients with T2DM. We also expect the newer guidelines for DM from ADA and AACE would be certainly made with these important studies taken into consideration.

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