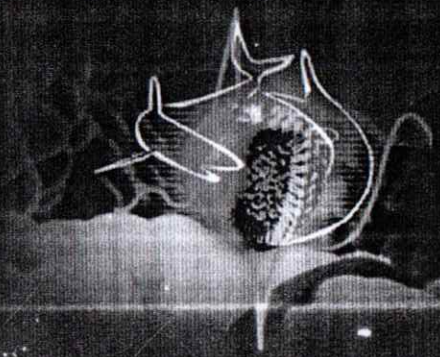
SURABAYA DIABETES UPDATE SURABAYA OBESITY UPDATE

SURABAYA DIABETES UPDATE (SDU)
SURABAYA OBESITY UPDATE (SOBU)
SURABAYA METABOLIC SYNDROME UPDATE (SUMETSU)
METABOLIC CARDIOVASCULAR DISEASE SURABAYA UPDATE (MECARSU)

SYMPOSIUM

CABANG SURABAYA

CABANG SURABAYA



Proceeding

THE QUADRUPLE JOINT SYMPOSIUM - 2020

1. SURABAYA DIABETES UPDATE (SDU)
2. SURABAYA OBESITY UPDATE (SOBU)
3. SURABAYA METABOLIC SYNDROME UPDATE (SUMETSU)
4. METABOLIC CARDIOVASCULAR DISEASE SURABAYA UPDATE (MECARSU)

THEME:

CARDIOMETABOLIC HEALTH TOWARD–2020
CHALLENGES in PREVENTION and TREATMENT of DM, OBESITY, MetS, CMR, and the CMDs

Date :

8-9 February 2020

SURABAYA
JW Marriott Hotel

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When to Start Basal Insulin Therapy in Type 2 Diabetes Patients

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Introduction

Type 2 diabetes (T2D) accounts for 90% of all cases of diabetes, however, the vast majority of patients in treatment for T2D have suboptimal glycemic control, with glycated hemoglobin (A1c) levels greater than the 7%. The number of people living with diabetes mellitus in Indonesia has continued to increase over the last decade. Indonesia is ranked 7th in the world in terms of most people with diabetes. There were over 10,700,000 cases of diabetes in adults in Indonesia in 2019 (IDF Atlas, 2019). Data at the Dr. Soetomo Hospital in 2007 showed that the prevalence of DM who underwent hospitalization reached 16.4% with a range of complications and mortality reached 28.8%. As the prevalence of DM is increasing, it is very important to improve glycemic control to delay microangiopathy, neuropathy and other complications of diabetes (Pranoto A et al, 2015).

Traditional oral antidiabetic drugs (OADs) such as sulfonylureas (SUs), thiazolidinediones (TZDs), and metformin, have limited durability with respect to glycemic control. A 6-year survey determined that 53% of patients allocated to treatment with an SU required insulin therapy for the first time by the end of the study period. T2D is a progressive disease, characterized by gradual deterioration in pancreatic beta-cell function, decreasing insulin levels, and increasing insulin resistance, ultimately leading to chronic hyperglycemia. At diagnosis, most patients with T2D have already lost 50% of their remaining beta-cell function, which reduces rapidly over a period of just a few years. This rapid beta-cell decline means that insulin replacement quickly becomes necessary in order to achieve and maintain glycemic control, because other available therapies rely on the body's ability to produce insulin. As such, insulin replacement is the most effective treatment for long-term control of hyperglycemia, and significant improvements in glycemic control can be achieved with this therapy in a short time.

There are 3 stages to insulin therapy: initiation, optimization, and intensification. This review focuses on basal insulin initiation and optimization. The right time to initiate insulin therapy will be considered, as will suggestions for overcoming patient and physician barriers to initiating insulin therapy. Practical formula for patients starting insulin therapy will be discussed, including the initial optimization of dose titration to achieve target A1c levels (Philis-Tsimikas, 2013).

Conclusion

The majority of patients in treatment for T2D have suboptimal glycemic control, with glycated hemoglobin (A1c) levels greater than the 7%. When glycemic control cannot be achieved using the maximum-tolerated dose of metformin (or another OAD), insulin initiation must be considered as a next step. Basal insulin remains the single most effective medication to reduce hyperglycemia and is a recommended option that can be combined with almost all other T2D therapies. Biosimilar insulins glargine are expected less cost with comparable safety and clinical efficacy. These biosimilars may be considered as alternative options for non-basal and basal insulin therapy in patients with type 1 and type 2 diabetes.

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Should we shift the diabetes management paradigm?

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Pendahuluan:

"Diabetes mellitus" sudah dikenal sejak zaman sebelum masehi. Prevalensi diabetes makin lama makin meningkat dan mereka dengan diabetes sekarang dapat hidup lebih lama.Terapi diabetes sejak hasil "CVOT" diumumkan mulai memberikan dampak yang positif terhadap penyakit kardiovaskular dan pengobatan dengan memperhatikan beberapa faktor secara bersamaan mulai lebih di mengerti. Sebelumnya banyak sekali usaha telah dilakukan untuk mengobati penyakit ini, tetapi baru sejak insulin ditemukan pada tahun 1920 diabetes mulai dapat diobati. Setelah sulfonilurea (1956) dan metformin (1959) ditemukan, terdapat kekosongan selama 35 tahun, dan baru pada tahun 1995 ditemukan "Alpha Glucosidase Inhibitor" (Acarbose) . Setelah itu, baru mulai ditemukan Glitazone, Glinides, GLP-1-RA, Pramlintide, DPP-4i, Bromocriptin, dan akhirnya SGLT2i. Setelah Rosiglitazon dihubungkan dengan peningkatan risiko Infark Miokard dan kematian kardiovaskular, maka sejak tahun 2008, FDA membuat peraturan tentang obat baru diabetes. Setiap obat diabetes baru harus dilakukan "CVOT". Mulai tahun 2013, Examine, Savor-TIMI, TECOS, CARMELINA, kemudian CAROLINA. secara bertahap mulailah memberikan hasil. "CVOT" untuk DPP-4i yang ternyata semua non-inferior. Kemudian hasil-hasil "CVOT' SGLT2i ; seperti EMPA-REG Outcome, Canvas, Canvas-R, CREDENCE, Declare-TIMI ternyata memberikan hasil yang berbeda-beda. Setelah EMPA-Reg outcome pada tahun 2015 memberikan hasil yang superior dan kemudian Canvas, Credence, Declare-TIMI juga memberikan hasil yang sebagian superior, maka hasil-hasil tersebut mempunyai dampak positif terhadap pengobatan diabetes di kemudian hari. Pada tahun 2018, mulai terdapat rekomendasi yang memasukkan hasil EMPA-REG ke dalam *guidelines* di banyak negara. Melihat hasil-hasil CVOT, DDP-4i, SGLT2i, dan GLP1-RA, maka sepantasnya kita merubah pola pikir kita dalam menangani diabetes di kemudian hari.(gambar1)