ADA-EASD vs IDF 2011 Algoritmi a confronto

Antonio Ceriello

Insititut d'Investigacions Biomèdiques August Pi i Sunyer (IDIBAPS) Barcelona Spain



Institut D'Investigacions Biomèdiques August Pi i Sunyer

ADA / EASD consensus Management of hyperglycaemia in type 2 diabetes

Tier 1: Well validated core therapies



ADA / EASD consensus Management of hyperglycaemia in type 2 diabetes



Basal Analogues Approach

Start with 10 IU/d	y bedtime basal	insulin and adj	ust weekly
--------------------	-----------------	-----------------	------------

Mean of self-monitored FPG values from preceding 2 days	Increase of insulin dosage (IU/day)
≥180 mg/dl (10 mmol/l)	8
140–180 mg/dl (7.8–10.0 mmol/l)	6
120–140 mg/dl (6.7–7.8 mmol/l)	4
100–120 mg/dl (5.6–6.7 mmol/l)	2

Target FPG-Value < 100mg/dl (< 5.6 mmol/l)

Insulin Glargine vs NPH Insulin Added to Oral Therapy (Treat to Target Trial)

Results

ITT Analysis	Insulin Glargine	NPH
FPG, mg/dL	117	120
mM	6.5	6.68
A1C, %	6.96	6.97
Final A1C ≤7% (% patier	nts) 57	57
Nocturnal hypoglycemia		
Patients,* %	40	49
Events, [†] no.	532	886
Severe hypoglycemia Patients, %	2.5	2.3

**P*<0.01; †*P*<0.002

Riddle MC, et al., *Diabetes Care* 2003; 26: 3080-3086.

Basal Insulin to OHA

Basal insulin to continued OHA therapy (including metformin) is a simple and effective means of introducing insulin therapy.

It is not clear whether this initiation regimen will prove durable in maintaining longer-term glycaemic control.

 \rightarrow Clinical experience suggests not

'Glucose triad' of diabetes management



 HbA_{1c} = glycated haemoglobin FPG = fasting plasma glucose



Daily glycemic variation (mmol/L) with worsening glycaemic control in type 2 diabetes



Optimal Insulin Regimens in Type 2 Diabetes mellitus: systematic review and metaanalyses

CONCLUSIONS/INTERPRETATION:

Greater HbA(1c) reduction may be obtained in type 2 diabetes when insulin is initiated using biphasic or prandial insulin rather than a basal regimen, but with an unquantified risk of hypoglycaemia.

Studies with longer follow-up are required to determine the clinical relevance of this finding.

Efficacy of insulin analogs in achieving the hemoglobin A1c target of <7% in type 2 diabetes: meta-analysis of randomized controlled trials.

CONCLUSIONS:

A greater proportion of type 2 diabetic patients can achieve the HbA(1c) goal <7% with biphasic or prandial insulin compared with basal insulin; in absolute terms, the basal-bolus regimen was best for the attainment of the HbA(1c) goal.

Giugliano D. et al. Diabetes Care 2011; 34:510-517.

Consensus algorithm of the American Diabetes Association and the European Association for the Study of Diabetes: some concerns.

A. Ceriello

Diabetologia 2009; 52:1696-1697

Is the ADA/EASD algorithm for the management of type 2 diabetes (January 2009) based on evidence or opinion? *A critical analysis.*

G. Schernthaner, A. H. Barnett, D. J. Betteridge, R. Carmena,
A. Ceriello, B. Charbonnel, M. Hanefeld, R. Lehmann,
M. T. Malecki, R. Nesto, V. Pirags, A. Scheen, J. Seufert,
A. Sjohölm, A. Tsatsoulis, and R. DeFronzo

Diabetologia 2010; 53: 1258–1269

Is the ADA/EASD algorithm for the management of type 2 diabetes (January 2009) based on evidence or opinion? *A critical analysis.*

In our view, this algorithm does not offer physicians and patients the appropriate selection of options to individualise and optimise care with a view to sustained control of blood glucose and reduction both of diabetes complications and cardiovascular risk. This paper critically assesses the basis of the ADA/EASD algorithm and the resulting tiers of treatment options.

Diabetologia 2010; 53: 1258–1269

The New IDF Therapeutic Algorithm

