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Diabetes-Related Outcomes following Use of Basal-Bolus Insulin Vs Premixed Insulin In a VA Population With Type 2 Diabetes: A Retrospective Chart Review.

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DIABETES-RELATED OUTCOMES FOLLOWING USE OF BASAL-BOLUS INSULIN VS PREMIXED

Characteristics

INSULIN IN A VA POPULATION WITH TYPE 2 DIABETES: A Retrospective Chart Review.

Variable



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Basal Bolus Insulin Group

n = 70

Premixed Insulin Group

n = 70

67.0±9.1

5 (7.1)

65 (92.9)

32.5±6.1

33.0±6.3

0.40±2.2

P value

0.07

0.5

0.3

0.2

0.2

8.0

0.4

0.3

0.3

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Background
 The complexity of basal bolus insulin (BB) therapy may adversely influence patient compliance. Premixed insulin (PM) is simpler and chea but is perceived to be less effective in mar diabetes (DM). We compared DM-related outcomes between BB and PM insulin regimens among a veter.
and a second attack and the terms of DAA

heaper managir between veteran population with type 2 DM.

Methods This is a retrospective chart review that enrolled 140 veterans (70 in each group) with type2 DM. Inclusion criteria: Age > 18 years and A1C ≥ 8%. Exclusion criteria: Type 1 DM and switching insulin regimen during the follow-up period. The included subjects were followed for a year, after starting 70/30 insulin NPH/regular (PM) OR detemir or glargine + aspart, lispro or regular insulin (BB). Our primary outcome was change in HbA1c one year of insulin therapy. Change in body mass index (BMI) and the rate of

Data were analyzed using Chi-square/Fisher exact tests

hypoglycemia were secondary outcomes

and logistic regression.

	Age (years)
	Gender
g	Baseline BN
	Follow-up B
	BMI differer
	Baseline BM
	Follow-up B

Age (years)	-
	Fem
Gender	Male
Baseline BMI (kg/m²)	-
Follow-up BMI	-
BMI difference	-
	Norr
Baseline BMI Status	Ove
	Obe
Follow-up BMI Status	Norr
	Ove
	Obe
Change in HbA1c	-
Hypoglycemia	Yes
	No

•	64.5±10.8
Female	3 (4.3)
Male	67 (95.7)
-	33.0±5.8
-	33.8±5.7
-	0.84±3.1
Normal (18.5-24.9)	7 (10.0)
Overweight (25.0-29.9)	14 (20.0)
Obese (≥30.0)	49 (70.0)
Normal (18.5-24.9)	4 (5.7)
Overweight (25.0-29.9)	15 (21.4)
Obese (≥30.0)	51 (72.9)
-	-1.9±1.8
Yes	21 (30.0)
No	49 (70.0)

7 (10.0)	7 (10.0)
14 (20.0)	17 (24.3)
49 (70.0)	46 (65.7)
4 (5.7)	5 (7.1)
15 (21.4)	21 (30.0)
51 (72.9)	44 (62.9)
-1.9±1.8	-2.1±1.9
21 (30.0)	15 (21.4)
49 (70.0)	55 (78.6)

Following treatment initiation, there was no statistically significant difference between the BB and PM insulin groups for change in A1c (-1.9±1.8 vs - 2.1±1.9%, p = 0.3).
Conclusion
There were no significant differences in A1c change, rate of hypoglycemia, and change in body mass index in patients

treated with either BB or PM

These results suggest that PM

insulin is equally effective and

safe as BB insulin therapy.

The use of PM insulin can

potentially improve patient

compliance and reduce the

insulin among our study

population.

cost of care.