



**Short Communication** 

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# Alopecia Areata Developing in Non-Insulin Dependent Diabetes Mellitus Type-2, an Autoimmune Disease



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Keywords: Non-insulin diabetes mellitus; Diagnosed; Polydipsia; Polyphazia; Polyuria; Glycosylated hemoglobin; Alopecia areata; Pancreatic endocrine; Overlapping syndrome

Abbreviations: NIDDM: Non-Insulin Diabetes Mellitus; OLAS: Overlap Autoimmune Syndrome; MAS: Multiple Autoimmune Syndrome; HB: Hemoglobin Test

#### Introduction

A 53-years-old elegant woman weighing 65 Kg, a well-established incumbent of non-insulin diabetes mellitus (NIDDM) type 2 was diagnosed on the basis of polydipsia, polyphazia and polyuria with apparent time to time fluctuating blood sugar level determine by glucometer the fasting blood sugar as well as post prandial blood sugar has been invariably high. Pancreatic endocrine test the glycosylated hemoglobin test (HbA1c) 8.5%. Accordingly, oral anti-diabetic treatment comprising metformin 500 milligram, glimepride 2 milligram, and pioglitazone 15 milligram is being administered ever since an hour before major meals. She has been by enlarge comfortable following therapy. However, she was taken aback by an asymptomatic well-circumscribed local loss of hair, the alopecia areata [1] confined to the temporal aspect of the scalp (Figure 1), that brought the patient for expert opinion.

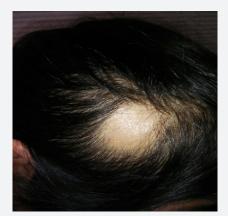


Figure 1: Depicting alopecia areata.

Table 1: Endocrine Glands Function Test.

Endocrine Glands	Endocrine Function Test	Value	Normal Value
HbA1c	Glycosylated hemoglobin Test	8.50%	5.7%-6.4%
Adrenal glands	Adrenal function test (ACTH)	29.30pg/mL*	<46.00
Thyroid glands	Т3	2.49 pg/mL	2.30-4.20
	T4	1.22 ng/dL	0.89-1.76
	TSH	4.561 uIU/mL	0.550-4.780
Parathyroid glands	Parathyroid hormone (PTH)	35.50 pg/mL	14.00-72.00
Prostate gland	Prostate specific antigen (PSA)	0.505 ng/mL	<4.00
Female Gonads	Ovarian function test	465.27 ng/dL	241.00-827.00
	Follicle stimulating hormone (FSH)	58.76 mIU/mL	Adult female
			Follicular 2.50-10.20

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			Mid cycle peak 3.40-33.40
			Luteal phase 1.50-9.10
			Post-menopausal 23.00-116.30
			Pregnant < 0.30
	Luteinising hormone (LH)	28.94 mIU/mL	Adult female
			Follicular 1.80-11.78
			Mid cycle peak 7.59-89.08
			Luteal phase 0.56-14.00
			Post-menopausal 5.16-61.99
	Prolactin	3.27 ng/mL	Adult female
			Non-pregnant 2.80-29.20 pregnant 9.70- 208.50 post-menopausal 1.80-20.30

<sup>\*</sup>picograms per millilitre (pg/mL)

All the endrocrine functions test were within normal range, except for pancreatic function test, the glycosylated hemoglobin test (HbA1c) was high. The endocrine function test including thyroid gland, parathyroid gland, adrenal cortex, pancreas and ovaries the female gonad was requisition to take stock of autoimmunity (Table 1), the multiple autoimmune syndrome (MAS) [2] / overlap autoimmune syndrome (OLAS)

Non-insulin dependent diabetes mellitus (NIDDM) type 2, a well-known autoimmune disease, of diverse undertone [3] / adult onset diabetes mellitus [4]. Indeed, alopecia areata developing in NIDDM type 2 is intriguing, reiterating autoimmunity as its probable etiology [5], a glaring illustration of multiple / overlapping syndrome, the reporting of such cases is too few and far between [6]. Surely, reporting of these cases should prove informative for the future.



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