

## Hypoparathyroidism, Vitiligo, Poliosis, and Macrocytic Anemia: A New Syndrome

Aamir Jalal Al Mosawi<sup>1,2\*</sup>

<sup>1</sup>Senior Advisor, Doctor, Children Teaching Hospital, Baghdad Medical City, Baghdad, Iraq

<sup>2</sup>Head, Iraq Headquarter of Copernicus Scientists International Panel, Baghdad, Iraq

\*Correspondence: Aamir Jalal Al Mosawi, Senior Advisor, Doctor, Children Teaching Hospital, Baghdad Medical City, Baghdad, Iraq, Tel: 9647703930834; E-mail: [almosawiAJ@yahoo.com](mailto:almosawiAJ@yahoo.com)

### Abstract

The syndrome of childhood hypoparathyroidism, vitiligo, poliosis, and macrocytic anemia has not been reported in the literature before. The aim of this paper is to describe the first case of this syndrome which was observed for the first time in Iraq.

**Keywords:** *New syndrome; Hypoparathyroidism; Vitiligo; Poliosis; Macrocytic anemia*

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### Introduction

Pediatric hypoparathyroidism is a rare endocrine disorder caused by low circulating levels of parathyroid hormone. It can be congenital or acquired. The congenital disorder can result from aplasia or hypoplasia of parathyroids or occurs as a part of genetic syndromes such as Sanjad-Sakati-Richardson Kirk syndrome and DiGeorge syndrome. Non syndromic genetic hypoparathyroidism can be inherited as autosomal dominant and X-linked recessive disorders. Acquired hypoparathyroidism can be autoimmune disorder or classified as idiopathic. Autoimmune hypoparathyroidism is generally suggested by its frequent association with moniliasis and other autoimmune disorders [1-3].

The syndrome of childhood hypoparathyroidism, vitiligo, poliosis, and macrocytic anemia has not been reported in the literature before. The aim of this paper is to describe the first case of this syndrome which was observed for the first time in Iraq.

### Case Report

A twelve-year old girl presented with chronic hypocalcemia associated with recurrent paresthesia (an unpleasant tingling sensation around the mouth and in the hands and feet), and carpopedal spasms.

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Serum calcium was 5.9 mg/dL (Normal: 8.4-10.45.9 mg/dL).

Serum phosphorus was 9.7 mg/dL (Normal: 2.5-5 mg/dL).

Serum parathyroid hormone was 3.15 pg/ml (Normal: 15-653.15 pg/ml).

She also had vitiligo (Figure 1) which appeared several months before the appearance of hypocalcemia.



**Figure 1:** The girl had vitiligo which appeared several months before the appearance of hypocalcemia.

The girl also had history of macrocytic anemia before more than one year that was treated successfully with four doses of B12 (1000 µg) given by intramuscular injection.

The girl was doing well in school and there was no family history of hypocalcemia nor vitiligo.

The girl had also whiteness in areas of scalp hair and also whiteness of her eye lashes, poliosis (Figure 2).



**Figure 2:** The girl had also whiteness in areas of scalp hair and also whiteness of her eye lashes, poliosis.

The hemoglobin level was 13 g/dL.

Other hormonal studies showed normal findings:

Adrenocorticotrophic hormone level was 21.9 pg/ml (Normal: 7.4-64.3 pg/ml).

T3 was 1.19 ng/ml (Normal: 0.79-1.58 ng/ml).

T4 was 6.8 µ iu/ml (Normal: 4.9-11 µ iu/ml).

TSH 0.653 milli iu /ml (Normal: 0.35-4.31 milli iu/ml).

There was no evidence of adrenal insufficiency as serum electrolyte levels were within normal:

Serum sodium was 142 mmol/L.

Serum potassium was 3.5 mmol/L.

Serum chloride was 113 mmol/L.

Blood glucose level and renal function tests were all within normal:

Blood glucose level was 107.6 mg/dL,

Serum creatinine was 0.6 mg/dL.

Blood urea was 12.56 mg/dL.

The girl didn't have evidence of malabsorption or steatorrhea.

Anti-tissue trans-glutaminase IgA level was 1.1 unit/ml (Normally less than 12 unit/ml).

Anti-gliadin IgG level was 0.4 unit /ml (Normally less than 25 unit/ml).

## **Discussion and Result**

Idiopathic hypoparathyroidism has not been documented in Iraq.

However, a case of autoimmune hypoparathyroidism associated with alopecia totalis has been observed in Iraq during the 1990s and was presented as a case study in a medical leadership training course which was published as a book in 2017 by Al Mosawi [4].

The patient was a twelve-year year bald girl who had cataracts and was hospitalized at the University Hospital in Al-kadhimiya in Baghdad during the 1990s. Dawood Al Thamiry who was a consultant pediatrician diagnosed the girl's illness as resistant epilepsy despite the girl was having attacks of tetany without loss of consciousness.

However, Aamir Al Mosawi who was known also as Amer Jalal who was a pediatric resident during that time diagnosed her illness accurately as autoimmune hypoparathyroidism associated with alopecia totalis and complicated by cataract.

Al Mosawi presented the case at a medical and healthcare leadership course which he conducted and the course book was published in 2017 [1,4].

Sanjad Sakati Richardson Kirk Syndrome, a disorder associated with congenital hypoparathyroidism has been well described in Iraq by Al Mosawi in 2018 [2,3].

The first Iraqi patient with Sanjad-Sakati-Richardson-Kirk syndrome was the case number 104 of the syndrome in the world.

The boy had:

- 1) Severe growth retardation
- 2) Chronic hypocalcemia
- 3) Seizures
- 4) Mental retardation
- 5) Dysmorphic features.

In this paper, I am suggesting the appearance of a new syndrome consisting of:

- 1) Childhood autoimmune hypoparathyroidism
- 2) Vitiligo
- 3) Poliosis
- 4) Macrocytic anemia.

### **References**

1. Al-Mosawi AJ (2019) The syndrome of childhood hypoparathyroidism, vitiligo, poliosis, and macrocytic anemia (1<sup>st</sup> Edn.) Saarbrücken; LAP Lambert Academic Publishing.
2. Al-Mosawi AJ (2018) Sanjad Sakati Richardson Kirk Syndrome (1<sup>st</sup> Edn.) LAP Lambert Academic Publishing, Germany.
3. Al-Mosawi AJ (2019) Sanjad-Sakati-Richardson-Kirk syndrome. Archives of Disease in Childhood 104(Suppl 3): A1-A355.
4. Al-Mosawi AJ (2017) Leadership in medicine and healthcare (1<sup>st</sup> Edn.) LAP Lambert Academic Publishing, Germany.