GROWTH HORMONE RESISTANCE; IRAQI EXPERIENCE

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INTRODUCTION

Primary growth hormone resistance or growth hormone insensitivity syndrome (Laron syndrome) is an autosomal recessive disorder caused by deletions or mutations in the growth hormone receptor gene or by post receptor defect(1,2).

AIM

By presenting two Iraqi cases, with primary growth hormone resistance (Laron syndrome) we aim:
1.To highlight on the prevalence of this condition in Iraq. As a sample for more than twenty case detected.
2. Appeal to high health authorities and societies to help in providing and approving recombinant IGF-1 therapy for these patients .

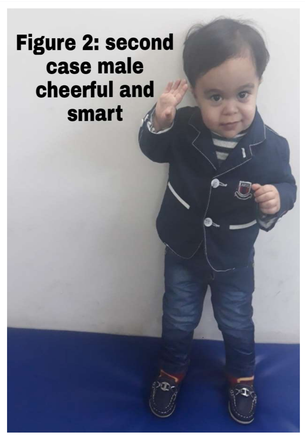
CASE REPORT CON.

Physical examination: Both cases revealed cheerful and smart children with severe linear growth retardation. (Figures 1,2). The photos published according to consent of the families.

Clinical appearance of severe growth hormone deficiency :midfacial hypoplasia, frontal prominence, Saddle nose, flat nasal bridge High pitched voice, dental caries, and Poor dentition. (Figures 3,4,5).

Measurements: for the first case (female) ,weight 11 kg , height 79 cm both they were far below the 3rd centile (Z-score for height -10.6 SD) . For the second case(male), his weight 10 kg , height 72 cm (Z-score for height -7.6 SD).Figures :6,7,8,9.

Investigations: disclosed high plasma GH levels and low IGF-1 in both cases . The rest of the investigations were normal.



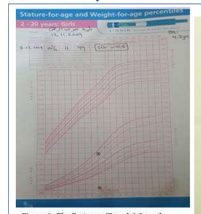


Figure 6 : The first case (Female) Growth chart height Z - Score is - 10.6 SD

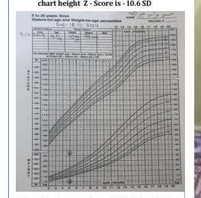
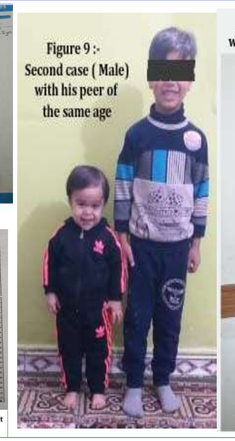


Figure 8 :- the second case (Male) Growth chart height Z - Score is - 7.6 SD



CASE REPORT

:**The first case** : A ten years and two months old female child presented, with sever growth retardation neonatal hypoglycemic seizures. She was a product of caesarean section for consanguineous marriage. Her intrauterine period was uneventful; full term, birth weight was 3.750 kg .

The second case: A five years old male child who is the son for the cousin of the first case. Presented with postnatal growth failure. Consanguinity, positive for both families as for the patients. Birth weight 3.5 kg .

CONCLUSIONS

Conclusion: from clinical and laboratory findings are collectively consistent with primary growth hormone insensitivity (Laron Syndrome).(1,2). We conclude that:
1. Primary growth hormone resistance (insensitivity) or Laron syndrome is not a very rare condition as mentioned in the literatures(1,2,3). In Iraq, more than twenty case were detected. The same observation was also found in the Arab Gulf Countries who are members in ASPED.
2. The need for concerted efforts to provide and approved use of IGF-1 therapy for these patients is a paramount. Added to that the availability of genetic study .

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