

Spontaneous Conception After Hyperprolactinemia Treatment In Laron Syndrome Patient

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Context: Diagnosis and treatment of patients with Laron syndrome and their capability to achieve pregnancy spontaneously.

Objective: Aim of this case report is to present a patient, diagnosed with Laron syndrome (or primary Growth Hormone Insensitivity), that visited the General Hospital of Messinia by reasons of infertility.

Methods: Complete medical history was retrieved, whereas laboratory tests, transvaginal ultrasound (TVUS) and Magnetic Resonance Imaging (MRI) were performed.

Patient: A 24 years old female patient approached the Gynecological Department of the General Hospital of Messinia in the interest of conceiving, as she had been making efforts with her male partner for over a year. The patient was diagnosed at the age of 14 with Laron syndrome, after completing full clinico-laboratory investigation – GH stimulation test with clonidine and glucagon, thyroid ultrasound, MRI of the hypothalamo-hypophyseal tract and IGF-I generation test (inadequate response). She suffered from short stature, high-pitched voice, proportionally larger head, obesity, sparse hair and was of average intelligence. Imaging assessment performed in our hospital revealed no defect of the genital tract. However hormonal tests exposed slightly elevated GH, decreased IGF-I and IGFBP-3 (as expected), low FSH, LH and PRG, normal E2 and hyperprolactinemia (92 ?g/l).

Intervention: The patient was introduced to therapy with Cabergoline, a potent dopamine receptor agonist on D2 receptors, in a dosage of 0.25 mg twice a week. Prolactin levels returned to normal after 3 months. After a normal serum prolactin level was maintained for 6 months, Cabergoline therapy ended. Repeated hormonal tests were performed until hormonal profile returned to normal and ovulation was reached.

Result: The patient conceived spontaneously 3 months after cessation of therapy. No gestational problems occurred during pregnancy. A healthy male neonate that weighed 2.300 gr, had length 47 cm, head circumference 31 cm and Apgar score 9/10 was vaginally delivered.

Conclusion: Laron syndrome in an extremely rare condition with numerous clinical and endocrinological characteristics, one of which is hyperprolactinemia. Thorough investigation and proper treatment resulted in ovulation and finally fertilization of the patient.