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A Double Challenge: Managing Precocious Puberty in Congenital Adrenal Hyperplasia with Gonadotropin Releasing Hormone Agonist

*Hossain AM[1], Tofail T[2], Banu H[3], Sultana N[4], Hasanat MA[5]

[1]Md. Ashraful Hossain, Resident, Department of Endocrinology, Bangladesh Medical University, Dhaka, Bangladesh; [2]Tania Tofail, PhD researcher, Department of Endocrinology, Bangladesh Medical University, Dhaka, Bangladesh; [3]Hurjahan Banu, Associate professor, Department of Endocrinology, Bangladesh Medical University, Dhaka, Bangladesh; [4]Nusrat Sultana, Associate professor, Department of Endocrinology, Bangladesh Medical University, Dhaka, Bangladesh; [5]Muhammad Abul Hasanat, Professor, Department of Endocrinology, Bangladesh Medical University, Dhaka, Bangladesh.

Abstract

Congenital adrenal hyperplasia is the most common cause of peripheral precocious puberty in boys. Treatment with hydrocortisone usually halt the progression of peripheral precocity. However, being on this treatment few cases may complicated to central precocious puberty. In such cases, treatment with Gonadotropin releasing hormone agonist (GnRHa) usually prevent further pubertal development and acceleration of bone age. Here, we presenting a case of eight years old boy who diagnosed as a case of peripheral precocious puberty due to congenital adrenal hyperplasia. He had a history of appearance of pubic hair and phallic enlargement at 6 years of age, aggressive behavior and hyperpigmentation. Notably, he had bilateral testicular microlithiasis and a varicocele. Despite treatment with hydrocortisone and fludrocortisone, his pubertal progression and advancement of bone age were continued. Clinical and hormonal evaluation subsequently confirmed conversion to central precocious puberty. Addition of a GnRHa to his glucocorticoid and mineralocorticoid regimen successfully arrested further pubertal progression. *[J Assoc Clin Endocrinol Diabetol Bangladesh, 2025;4(Suppl 1): S48]*

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***Presenting and corresponding author:** Dr. Md. Ashraful Hossain, Resident, Department of Endocrinology, Bangladesh Medical University, Dhaka, Bangladesh. Contact-01816490200, E-mail: ashrafulhossain30@gmail.com