THE INCREASED PREVALENCE OF CONGENITAL ADRENAL HYPERPLASIA IN SAUDI ARABIA: THE ROLE OF CONSANGUINITY AND MULTIPLE SIBLINGS INVOLVEMENT

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ABSTRACT

Background. Congenital adrenal hyperplasia is a group of autosomal recessive disorder resulting in the deficiency of one of the enzyme required to synthesize cortisol.
Design and setting: A retrospective – hospital based study, conducted at King Khalid University Hospital, Riyadh, during the period 1989 – 2014.
Materials and Methods: Medical records of patients diagnosed with congenital adrenal hyperplasia were reviewed retrospectively.
Results during the period under review (1989 – 2014), 95 Saudi patients were diagnosed with CAH; 76 (80%) patient (21-α-hydroxylase deficiency), 15 (15.8%) patients (11-β-hydroxylase deficiency), and 4 (4.2%) patients (3-β-HSD). Consanguinity was found in 56 (58.9%) patients. Thirty-one (55.4%) families had more than one affected child.
Conclusion: High rate of consanguineous mating and multiple siblings involvement in the Saudi population were important factors contributing to the increased prevalence of the disorders.

Keywords: Congenital adrenal hyperplasia, Consanguinity, prevalence, Saudi Arabia