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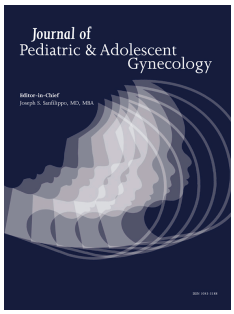

Evaluation and Management of Primary Ovarian Insufficiency in Adolescents and Young Adults

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Abstract

STUDY OBJECTIVE: To identify clinical features associated with primary ovarian insufficiency (POI) and collect data on the evaluation and treatment received.

DESIGN: Retrospective chart review. Data abstracted on etiology of POI, history, laboratory evaluation, imaging results, return for clinical care, and treatment plans.

SETTING: Urban children's hospital in Cincinnati, Ohio.

PARTICIPANTS: 50 females, age 11-26 years, with initial presentation of POI between January 1, 2006-December 31, 2015.

MAIN OUTCOME MEASURES: Etiology of POI, bone mineral density (BMD), laboratory evaluation, and services utilized at presentation.

RESULTS: 331 charts were reviewed, 71 with confirmed diagnosis of POI, and 50 with sufficient data for inclusion. Among the 50, 21 (42%) had Turner syndrome, 18 (36%) remained idiopathic, and 11 (22%) had another condition (e.g., autoimmune polyglandular syndrome, galactosemia, etc.). 36 (72%) were karyotyped; in 14 (28%), 21-hydroxylase antibodies were measured; 32 (64%) underwent DXA BMD measures of lumbar spine. 8 of 50 patients (16%) reported fracture. Of these, at presentation, 4 (50%) had low BMD, and 2 (25%) were slightly low. On initial spinal DXA, 9 of 32 (28%) had low BMD (Z-score ≤-2.0) and 7 of 32 (22%) were slightly low (-1.0 to -1.9). All started estrogen therapy within 2 years of presentation. In follow-up, only 2 patients (4%) saw a mental health consultant for emotional support.

CONCLUSION: POI is a model of estrogen deficiency with the majority of cases due to Turner syndrome or idiopathic causes. At presentation, many had low BMD and few were seen for psychological support as part of multidisciplinary care.

KEYWORDS: primary ovarian insufficiency, adolescence, amenorrhea, Turner syndrome, autoimmune, estrogen