

CASE REPORT

Chronic urticaria and irregular menstrual cycle: A case report of effective therapy with oral contraception

ALICJA KASPERSKA-ZAJĄC¹ & JACEK ZAMLYNSKI²

¹Chair and Clinical Department of Internal Diseases, Allergology and Clinical Immunology and ²Department of Gynecology, Obstetrics and Gynecological Oncology in Bytom, Medical University of Silesia, Katowice, Poland

Abstract

It has been reported that urticaria may be associated with some conditions characterized by sex hormone changes. The case presented concerns a 19-year-old patient who had severe symptoms of chronic urticaria for 3 years, concomitant with an irregular menstrual cycle and functional ovarian cysts. After a laparoscopic ovarian cystectomy the patient was treated with hormonal contraceptives. After 3 weeks the symptoms of urticaria withdrew. The patient continues to receive oral contraceptive treatment, has regular menstruation and shows no symptoms of urticaria. A diagnosis with an urticaria origin should take into consideration any changes in hormone balance as one of the possible reasons for the disease. In such cases, treatment with sex hormones may positively influence the course of the illness.

Key words: *chronic urticaria, hormonal contraceptives, irregular menstrual cycle, sex hormone*

Introduction

Our knowledge of the impact of sex hormones upon the expression of chronic urticaria and upon the course of the disease is very scarce. It has been reported that urticaria may be associated with some conditions characterized by hormonal changes, including menstrual cycle, pregnancy, menopause and hormonal contraceptives or hormone replacement therapy (1). We observed a lower serum dehydroepiandrosterone sulfate concentration in patients with chronic urticaria (2–4). Sex hormones modulate immune and inflammatory cell functions, including mast cell secretion (1).

Case report

The case presented concerns a 19-year-old female patient admitted to our clinical department for severe

symptoms of urticaria and angioneurotic edema. Her history included chronic urticaria for 3 years (diagnosed several times) of severe course, poorly responding to medical treatment, as well as an irregular menstrual cycle for 4 years, so far undiagnosed and never treated.

Ultrasonography upon admission showed right and left ovarian cysts. Hormone level: free testosterone 0.1 pg/ml (lab norms: 0.0–4.1), androstendione 1.5 ng/ml (lab norms: 0.4–3.4), dehydroepiandrosterone sulfate 106.6 µg/ml (51.7–417), prolactin 9.83 ng/ml (lab norms: 4.79–23.3); hirsutism: 8 points according to the Ferriman-Gallwey score. Following a gynaecological consultation, the patient was assigned for planned laparoscopy during which both periuterine cysts (4–5 cm each) were enucleated. The histological examination revealed two functional cysts. After surgery the patient was treated orally with contraceptives (cyproterone acetate, ethinylestradiolum). After 3 weeks the symptoms of urticaria withdrew.

Correspondence: Alicja Kasperska-Zajac, Chair and Clinical Department of Internal Diseases, Allergology and Clinical Immunology, ul. Ceglana 35, 40-952 Katowice, Poland. E-mail: kasperska@plusnet.pl

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The patient continues to receive oral contraceptive treatment, has regular menstruation and shows no symptoms of urticaria.

Discussion

The literature available contains no information on the advantageous effect of sex hormones upon the course of chronic urticaria. On the contrary, it has been suggested that exogenous estrogens, such as those contained in most oral contraceptives, may play a role in the aetiology of chronic angioneurotic oedema or urticaria (5). However, available data reveal contradictory results. Bork et al. suggested that any effect of oral contraceptives and hormone replacement therapy on chronic urticaria worsening is probably very small (6).

Based on our case, once hormonal therapy was commenced (due to other indications), the symptoms of urticaria disappeared. Therefore, a diagnosis with an urticaria origin should take into consideration any changes in hormone balance as one of the possible reasons for the disease. In such cases (following gynaecological consultation), treatment with sex hormones may positively influence the course of the illness.

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