Adult acne

In addition to teen acne, adult acne and more particularly acne in women is becoming increasingly common (around 25% of women), with certain clinical specificities that we will review below.

Acne in adult women

Pathophysiology

Adult female acne is acne that appears in women over 25, or that occurs as a prolongation of teen acne, which is the most frequent form of acne (1). Its apparent frequency is increasing, with 20% women between the ages of 25 and 40 affected (2). It is distinguished from teen acne by its chronic course.

To date, from a pathophysiological point of view, there are similarities with teen acne, with the exception of two major distinguishing features: hypersensitivity of keratinocyte and sebocyte androgen receptors, and chronic activation of innate immunity in connection with strains of C. acnes resistant to antibiotics due to repeated treatment with topical erythromycin in particular. There is probably also a genetic factor, although not identified to date, since 60% of adult women with acne have a family history. External factors involving the exposome are also involved, for example smoking, an unsuitable method of contraception, cosmetic errors and stress.

Clinical presentation

In addition to the usual signs of teen acne, female acne is characterized by its specific mandibular form, with lesions predominating on the lower part of the face (Fig. 1). There is often a moderate number of inflammatory lesions, combined with generally closed comedones and significant hyperseborrhea. Small numbers of deep nodules with periodic inflammatory flare-ups, most often associated with menstruation, are fairly characteristic.

Fig. 1: Adult female acne

Assessment

Acne in women should be investigated for associated clinical signs of hyperandrogenism (hirsutism, male-pattern hair loss, weight gain, amenorrhea or oligomenorrhea, infertility) in case of an underlying endocrine cause (particularly ovarian or adrenal) or polycystic ovary syndrome.

If there are no clinical signs of hyperandrogenism, a hormonal assessment is not indicated.

It is also important to ensure:

- no comedogenic cosmetics are being used
- no estrogen-progestins with an androgenic progestin component (1st or 2nd generation pill, progestin contraceptive implant) are being taken
- no acne-inducing medication is being taken for another indication

If there are doubts over whether the acne is of endocrine origin, especially if there are clinical signs of virilism associated with menstrual cycle disorders (irregular, painful), even excess weight, an ovarian

ultrasound and hormonal assessment should be carried out in the first part of the cycle to screen for polycystic ovary syndrome, for example.

This hormonal workup will include assays for free testosterone, delta-4 androstenedione, DHEA sulfate, LH and anti-mullerian hormone (polycystic ovary syndrome). An assay for 17-hydroxyprogesterone is indicated where there is suspicion of a partial 21-hydroxlase deficiency (3).

But in the great majority of cases, the hormonal assessment remains normal.

- A normal testosterone level, combined with a normal ultrasound, leads to a conclusion of “idiopathic” hirsutism.
- A testosterone level higher than 1.5 ng/mL should prompt investigation for an ovarian or adrenal tumor.
- A testosterone level between 0.3 and 0.8 ng/mL with a high level of anti-mullerian hormone and an ultrasound image showing polycystic ovaries suggests a diagnosis of polycystic ovary syndrome. It should be noted that there is a minor form in which acne lesions are associated only with regular anovulatory cycles and the appearance of ovarian microcysts on ultrasound images. In this case, an anti-mullerian hormone assay can be particularly useful.

Joint management by an endocrinologist or gynecologist may be proposed depending on the situation.

Progression

Acne in adult women is usually mild to moderate in intensity. A chronic course can extend into menopause. Oral antibiotics, isotretinoin and hormonal treatments are all commonly used. Among women aged ≥ 25 years, nearly 82% relapsed after multiple courses of systemic antibiotics (because antibiotic treatment is only suspensive), but nearly 32% also relapsed after isotretinoin treatment (4).When acne lesions recur shortly after a course of isotretinoin, an underlying endocrinological disorder should be suspected and appropriately investigated.

Adult male acne

Acne in adult males is less common and more difficult to estimate as it is found mainly on the back, often associated with hyperseborrhea. It is not more severe than in women. It poses the problem of a differential diagnosis with Malassezia furfur or Demodex.

Acne and pregnancy

The course of acne may vary during pregnancy, but in about 60% of cases it is aggravated; in some women, acne becomes worse or there is a relapse, while in others acne begins during pregnancy (5).

Acne during pregnancy poses a therapeutic problem for the physician, because systemic treatment with oral isotretinoin and tetracyclines (2nd and 3rd trimesters) is contraindicated, as are topical retinoids.

Zinc gluconate may then be an interesting alternative starting in the 2nd month of pregnancy. Benzoyl peroxide at concentrations of 2.5 or 5% is not contraindicated in pregnant women for use on the face in the evening.

• Sources

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