



Narrative Review

How to Manage Juvenile Acne

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KEYWORDS

*Acne vulgaris,
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ABSTRACT

This paper offers a structured synthesis of the management of Juvenile Acne, placing particular emphasis on communication with the patient and their parents. The content is organized into six principal components: three pertaining to diagnostic evaluation and three addressing therapeutic intervention.

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Introduction

Managing Juvenile Acne (JA) is, of course, a complex topic, as evidenced by the hundreds of studies published over the past decades, numerous attempts to classify the severity of the condition, and the various guidelines concerning treatment. The choice of therapy should be principally based on the type of lesion and the severity of the acne, but psychosocial disabili-

ty relating to the disease and the presence of scarring may also influence the approach to treatment. What is proposed here is a summary, with particular emphasis on communication with the patient and their parents, divided into six key points: three related to diagnostic assessment and three focused on treatment.

Diagnostic Assessment

1. Never underestimate the issue, but always investigate the adolescent's psychological aspects and the role of the parent.

It has been well established that the impact of Juvenile Acne on emotional and social quality of life is greater than that of other chronic conditions such as psoriasis, asthma, and epilepsy (1). JA is often the first persistent psychological distress linked to self-image and plays a critical role in the adolescent's identity formation (2). Notably, the impact on quality of life is not strictly correlated with the objective severity of the acne. Because of this disconnect between clinical severity and psychological burden, it is essential to carefully assess the adolescent's actual experience of the condition and their relationship with their parents (3).

The adolescent with acne is almost always accompanied to the consultation by a parent, raising the question of whether to address the adolescent or the parent. It is appropriate to engage with both, avoiding the exclusion of either.

This dual-channel communication - what becomes a "triangulation" between doctor, adolescent, and parent - generally favors pediatricians, who are already familiar with the parent-child dynamic. However, it still requires a solid understanding of adolescent psychology, especially in terms of body-centered identity exploration, issues related to peer group integration, and the evolving nature of their relationship with their parents. Two of the most frequent situations encountered are:

a) The parent who tends to speak and act on behalf of the adolescent, taking control over the perception and

evaluation of the condition as well as the request for treatment. This often corresponds with an adolescent who appears indifferent, defensive, or even hostile, and who tends to deny their emotional distress. In these cases, it is important to discourage the parent's tendency to "take over" and instead establish the adolescent's active involvement as a necessary condition, both in communication and in following the treatment plan.

b) The parent who is unaware or minimally aware of their child's psychological distress. In these situations, the parent should be asked to observe their child's emotional and behavioral dynamics more carefully, with the aim of supporting them more effectively throughout the therapeutic journey.

2. Carefully assess the primary lesions present on both the face and torso, comedones, microcysts, papules, pustules, nodules, and cysts.

This allows for the clinical classification of JA into non-inflammatory, superficial inflammatory, and deep inflammatory types. Based on the number and predominance of these lesions, the condition can also be categorized by severity: Mild, Moderate, or Severe (4).

It is also important to identify excoriated lesions, which are very common and often appear crusted (Fig. 1). These are clear indicators of psychological distress in the adolescent and play a critical role in the risk of scar development.

Any therapeutic choice should be tailored not only to the adolescent's psychological burden but also to the scarring risk associated with their lesions.



Fig. 1. Excoriated lesions in acne patients.

3. Always rule out endocrine disorders in female patients.

The association of Juvenile Acne with Androgenetic Alopecia and/or Hirsutism (Fig. 2) is particularly significant, as both conditions are mediated by androgens and are therefore expressions of hyperandrogenism (HA).

HA is most commonly primary, due to increased peripheral action of androgens resulting from heightened receptor sensitivity, and less frequently secondary. Secondary HA may stem from excessive adrenal androgen production (5% of cases), typically related to late-onset Congenital Adrenal Hyperplasia, or from ovarian origins (95%), most commonly Polycystic Ovary Syndrome (PCOS) or PCOS-like syndromes, the latter being very common in adolescent girls with acne.

Although primary HA is far more prevalent, it is cru-

cial to identify secondary forms to ensure appropriate therapeutic intervention.

Therefore, in all girls presenting with acne, both objective evaluation (starting with hair and body hair) and a thorough patient history are essential. A key factor is assessing the regularity of menstrual cycles. If a patient experiences fewer than 9 menstrual periods per year, this alone allows for a presumptive diagnosis of secondary HA. That diagnosis must then be confirmed and further investigated through ovarian ultrasound and/or laboratory testing, to be performed within the first 5 days of the menstrual cycle. These tests should include adrenal-derived androgens, ovarian hormones, pituitary regulators of ovarian function (with a critical focus on the FSH/LH ratio) insulinemia, considering the frequent link between PCOS and hyperinsulinism.

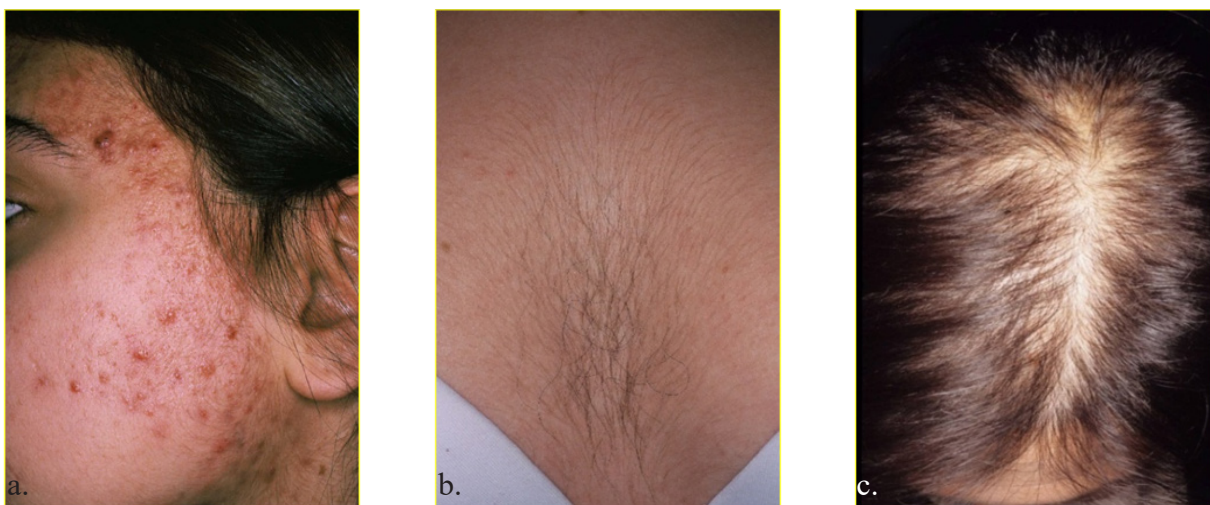


Fig. 2. Acne (a) associated with hirsutism (b) and androgenetic alopecia (c).

Therapy

1. Promoting Therapeutic Adherence

Large-scale studies conducted over many years have demonstrated that inadequate Therapeutic Adherence (TA) is responsible for treatment failures in 40-60% of adolescents. Their parents, too, often lack understanding of the underlying causes of unsuccessful acne management, which is largely due to persistent misconceptions. To promote effective TA, it is essential to dedicate time to explain these causes clearly-debunking widespread myths such as: the supposed central role of diet (even in adolescents who are of normal weight and without endocrine disorders), liproper cleansing routines, use of makeup, sun exposure. Instead, attention should be given to explaining the true contributing factors, including: genetic predisposition, the crucial relationship between hormones and skin physiology. This also provides justification for in-depth patient history and, when necessary, instrumental and/or laboratory investigations, especially in female patients.

To support Therapeutic Adherence, it is also recommended to schedule follow-up appointments every 2 - 3 months, or as needed in cases of side effects caused by topical and/or systemic treatments.

2. Proposing treatment through shared decision-making.

To achieve this goal, it is first essential to provide explanations regarding the severity scale of Juvenile Acne, alongside a simplified overview of potential therapeutic steps, so that the most appropriate course of action can be evaluated together. Beyond the many clinical guidelines developed over the years (5, 6) - culminating in the most recent recommendations from the American Academy of Dermatology - and the various

clinical practice criteria that each dermatologist or pediatrician may choose to follow in treating JA and any associated endocrine disorders, it remains crucial to dedicate time to communicating with the patient and their parent, in order to fully involve them in the therapeutic decision-making process.

3. Do Not Fear the Side Effects of Topical Medications.

Considering that in approximately one-third of cases, topical treatment for Juvenile Acne - whether using retinoids, benzoyl peroxide, or their combinations - can cause varying degrees of irritant contact dermatitis (Fig. 3), it is important to emphasize that symptoms such as erythema, dryness, peeling, and burning may appear even after weeks or months of use. These effects are often linked to excessive quantity or frequency of application, depending on the adolescent's skin phototype. It is therefore essential to inform both the adolescent and their parent about the potential side effects of topical therapies. Explain clearly not only the timeline but also the practical usage methods with a demonstration using any moisturizer available in the clinic. In addition, guidance should be provided on what actions to take if these side effects occur: suspend application of the product, increase the use of a moisturizer (typically recommended alongside the medication). Once the dermatitis resolves, reintroduce the anti-acne topical agent with reduced quantity and/or frequency. Only in more significant cases, and under a physician's recommendation, should a topical corticosteroid be applied for a few days.



Fig. 3. Irritant contact dermatitis after application of tretinoina cream.

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