

Red Papules and Pustules on Chest

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A 17-year-old male presents with red papules and pustules on his chest of three-years duration. They are occasionally pruritic and tender. There are a few such lesions on his face and shoulders as well.

What is your diagnosis?

- a. Folliculitis
- b. Rosacea
- c. Pustular psoriasis
- d. Acne vulgaris
- e. Bed bug bites

Answer

Acne vulgaris (**answer d**) is a common skin disease affecting more than 90% of people at some point in their lives. It is characterized by non-inflammatory papules (comedones) and/or by inflammatory papules, pustules, and nodules in its more serious form. It affects skin that is dense with sebaceous follicles, including the face, upper chest, and back.

The four key etiopathogenic factors are follicular epidermal hyperproliferation and hyperkeratinization, excess sebum, the bacteria *Propionibacterium acnes*, and inflammation. Acne can have a significant psychosocial impact on patients, regardless of the severity of the disease. It can result in depression, anxiety, relationship difficulties and other psychological sequelae.

Acne can be worsened by some cosmetic agents and hair pomades, as well as by such medications as: steroids, lithium, antiepileptics, and halogens (e.g., iodides). There are genetic influences to acne as well.

Patients should be advised to wash their face with a mild soap or soap substitute cleanser once or, at most, twice a day. Over-the-counter salicylic acid preparations can be useful for mild or early cases of acne, although products that provide “scrubbing” can in fact worsen acne. Treatment is



geared towards the multiple pathogenic factors. Topical retinoids are predominantly comedolytic with mild anti-inflammatory activity. Topical antibiotics (e.g., clindamycin, erythromycin) work mainly on *P. acnes*, and may have some anti-inflammatory effects as well; they are not comedolytic, and unfortunately there is increasing resistance to topical antibiotic monotherapy. Benzoyl peroxide is available over-the-counter and by prescription, and can be used in combination with topical antibiotics and retinoids.

Systemic therapy often starts with oral antibiotics, particularly tetracycline, minocycline, or doxycycline. They are effective against *P. acnes*, but more importantly, they have anti-inflammatory effects. In female patients, hormonal therapies (e.g., oral contraceptive pill, spironolactone) can be of significant benefit. Medically, the “big gun” is isotretinoin (Accutane®), a systemic retinoid that is highly effective for severe, recalcitrant acne, but is also used for more moderate cases as well (e.g., older female with stubborn acne, or moderate scarring acne).

CME

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