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Angular cheilitis: a maligned condition.

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Why an essay on angular cheilitis, an easily recognized cutaneous entity? One suggestion rests with the observation that angular cheilitis could be one of the most maligned conditions seen in contemporary practice. The fissuring, redness, and soreness at the angles of the mouth may not be catastrophic, but the embarrassment and soreness are disconcerting. Another that is more disturbing concerns the unnecessary testing and treatment often seen in the community.

When a middle aged man presented with angular cheilitis on routine examination, he asked if this was due to a vitamin deficiency. Fig 1 He had been told by a physician and, of course, by Aunt Mabel that his diet was the problem.[1] In addition to having been prescribed multivitamins, a high potency steroid cream, and an antifungal preparation for presumed *Candida albicans* infection, he was instructed to eliminate several foods from his diet including anything spicy, plus carbonated beverages.

Causation

Angular cheilitis, also known as perleche, cheilosis, or angular stomatitis, is simply an inflammatory condition of the labial commissures, characterized by cracking, crusting, and in severe cases bleeding. Probably, the most common cause is the recession of the boney support of the lower aspects of the mouth. This can result in an overbite with the upper lip protruding over the lower. The situation can then be aggravated by dentition in less than stellar condition, or dentures that have not been adjusted in some time. A set-up for the problem may even have been initiated by thumb-sucking that continued long after the toddler years.

There are innumerable other causes that could be listed in a differential diagnosis, such as lip licking or actinic cheilitis Fig 2 & 3 For example, unilateral lesions due to trauma are short-lived, while bilateral lesions are more likely long-standing.[2] Peri-oral dermatitis

may also extend to the commissures. Fig 4 Oral thrush could also be manifested at the commissures, but these causes are infrequent.

Ultimately, mechanical trauma to the area is likely to be the primary culprit, but less common etiologies in practice, better known by physicians in training, are nutritional deficiency, particularly of riboflavin, iron, cobalamin, or zinc. These deficiencies are often cited whether due to malabsorption from diseases such as celiac or malnutrition due to anorexia nervosa, as well as bulimia nervosa.[3] Patients suffering from diabetes, chronic renal failure, hepatitis, Sjogren's, Plummer Vinson or Crohn's can present with angular cheilitis, just to make the listing more complete.[4-6] Medications have also been shown to cause angular cheilitis. Antineoplastic agents, such as sorafenib and selumetinib, can cause cheilitis in patients being treated with them for various types of malignancies.[7,8] The condition is uncommonly caused or exacerbated by oral candidiosis or secondary bacterial infections.[9] In patients who are immunocompromised or have diabetes, malignancy, or anemia the likelihood of infection is increased.[10]

Intervention

With the multifactorial origin of angular cheilitis, treatment focuses on eliminating precipitating factors.[11] If the patient is a cigarette, cigar, or pipe smoker, this could be a problem. Mid- to low- potency steroid ointment is helpful. Almost never is a lipstick allergy, or for that matter a reaction to toothpaste, the cause. While angular cheilitis could masquerade as contact dermatitis, Fig 5 the chronic nature of the condition and the ineffectiveness of the mid- to low- potency steroids can indicate that another condition should be considered, such as impetigo or herpes zoster.

Comment [CC1]: Mention other contact allergies – toothpaste ??

Conclusions

Angular cheilits remains a chronic problem and is usually mechanical. While there are esoteric causes to be considered, more mundane etiologies are more likely. Identifying the underlying etiology is useful and allows for a more appropriate therapeutic approach, but looking for zebras should be reserved for the next safari!

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Fig 1 Angular cheilitis which had been incorrectly diagnosed as candidosis, as well as a vitamin deficency

Fig 2 Lip licking in a 10 year old girl

Fig 3 Peri-oral dermatitis extending to the commissures

Fig 4 Contact dermatitis due to neomycin ointment