



Letter to the Editor:

Rare facial dermatological lesions associated with *Demodex* infection, besides acne vulgaris

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I have read with great interest the recent article “A meta-analysis of association between acne vulgaris and *Demodex* infestation” by Zhao *et al.* (2012), published in *Journal of Zhejiang University-SCIENCE B (Biomedicine & Biotechnology)* (another two articles by Zhao *et al.* (2011a; 2011b) are also related to *Demodex* infestation). The article is highly thought provoking. Interestingly, *Demodex* infestation may be associated with a number of other facial dermatological lesions besides acne vulgaris.

For instance, *Demodex* infestation may cause blepharitis (Kosik-Bogacka *et al.*, 2012). While *Demodex* mites can by themselves cause blepharitis, in some cases they may act as carriers of bacteria such as *Bacillus oleronius* which in turn may play the primary pathogenic role in the development of blepharitis (Szkardkiewicz *et al.*, 2011). *Demodex* blepharitis is also more common in diabetics. In fact, in one recent study the prevalence of *Demodex* blepharitis in diabetic patients was as high as 54.8% (Yamashita *et al.*, 2011). A higher prevalence rate (as high as 4%) is also seen in human immunodeficiency virus (HIV) patients (Annam *et al.*, 2010). A highly effective treatment of *Demodex* blepharitis is ivermectin administered by the oral route (Filho *et al.*, 2011).

Demodex infestation can also play an etiopathogenic role in the development of acne rosacea as

well as pityriasis rosea (Forton, 2012). *Demodex* infection can also result in primary irritation dermatitis as well as scalp folliculitis and seborrheic dermatitis (Karincaoglu *et al.*, 2009). *Demodex* infection may present in rare cases as “pseudozoster” (Karincaoglu *et al.*, 2008). This is commonly seen after prolonged application of topical steroids. *Demodex* infestation may also rarely cause sebaceous adenomas (Dhingra *et al.*, 2009).

Physicians should be aware of these rare dermatological rashes and their close associations with *Demodex* infections.

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