**JID VisualDx Quiz: July 2015**

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Questions relate to the image as well as to selected articles in *JID*, which are listed after the questions. Answers will be posted as supplementary material. We hope you enjoy this challenge.

**QUESTIONS**

1. What is your diagnosis?
   
   a. Rosacea.
   
   b. Perioral dermatitis.
   
   c. Tubercous sclerosis.
   
   d. Acne vulgaris.
   
   e. Lupus miliaris disseminatus faciei.

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2. Which of the following statements regarding the treatment of acne vulgaris is false? (Choose all that apply.)
   a. Photodynamic therapy selectively targets and destroys the sebaceous glands in acne vulgaris.
   b. Selective photothermolysis of sebaceous glands can be achieved by topical application of microparticles followed by laser exposure.
   c. Gold-covered silica microparticles with maximum optical absorption at 800 nm exhibit plasmon resonance.
   d. The thermal injury created by optical particle-assisted photothermolysis affects the infundibulum, the sebaceous gland, and the adjacent dermis.
   e. The bulge area of the follicle where the stem cells reside is often damaged during selective photothermolysis of sebaceous glands.

3. Which of the following is TRUE regarding optical particle-assisted photothermolysis of sebaceous glands in acne vulgaris?
   a. It is a one-time treatment procedure.
   b. A potential concern is that cutaneous gold concentrations posttreatment are persistently elevated according to the safety threshold levels for organ absorption of gold.
   c. The damaged follicles and particles remain as foreign material in the dermis and are eliminated by macrophage-mediated phagocytosis and cytotoxicity.
   d. Selective folliculosebaceous absorption of 3% from the applied particle suspension is not sufficient to cause selective photothermolysis.
   e. Delivery of the microparticles into the follicular infundibulum is improved by massaging the microparticle suspension prior to laser treatment.

**TOPIC ARTICLE**

Questions 2 and 3 refer to the following article:


Answers are available as supplementary material at http://dx.doi.org/10.1038/jid.2015.172.