



PIC QUESTION OF THE WEEK: 1/15/07

Q: Why would antiviral agents be prescribed prior to dermabrasion?

A: In recent years, cosmetic facial resurfacing has gained in popularity. This procedure involves removal of layers of damaged or wrinkled skin resulting in improved appearance. There are now several techniques that can produce these effects and enhance quality of the skin. Dermabrasion is one of the most popular methods for facial resurfacing. Previously, dermabrasion required the actual physical sanding of skin and was relatively painful. Today, carbon dioxide (CO₂) lasers have replaced more primitive methods (sandpaper and other abrasive materials) and greatly decreased the amount of bleeding and time necessary for re-epithelialization. Chemexfoliation, also referred to as a “chemical peel,” utilizes organic acids (e.g. trichloroacetic acid, etc.) to achieve the same result. While the patient is subject to bacterial, fungal, and viral infection after these types of surgery, the procedure itself can reactivate latent herpes simplex virus (HSV types I and II) in many patients. An outbreak of herpes lesions can be a serious consequence of laser resurfacing and result in secondary bacterial infection, scarring, and increased healing time. It is unclear why this procedure reactivates the virus; however, it has been theorized that physical and/or emotional stress play a role. Affected patients present with complications ranging from progressive erythema, “prickly” pain, and cold sores to fulminant herpetic rash involving the entire treated area. The national seroprevalence of HSV-1 (57.7%) and HSV-2 (17.2%) are much higher than the reported reactivation rate of HSV (9%) in patients undergoing facial resurfacing. However, because of the number of patients at risk, it is recommended that all be prescribed prophylactic antiviral therapy to prevent reactivation, even those who deny a history of HSV. Two agents are currently recommended for prophylaxis prior to facial resurfacing. Famciclovir, 250mg twice daily starting 1-2 days prior to the procedure and continued for 5 days postoperatively is one option. Alternatively, valacyclovir 500mg prescribed twice daily for 14 days starting the *morning prior* or the *morning of* the procedure can also be used. Both regimens have provided 100% effectiveness in preventing reactivation of HSV. Prophylactic antiviral therapy is now considered part of the standard of care for facial resurfacing procedures.

References:

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