Delayed Pinpoint Purpura after Fractionated Carbon Dioxide Treatment in a Patient Taking Ibuprofen in the Postoperative Period

Letter to the Editor:

Fractionated carbon dioxide (CO2) ablative laser therapy is an increasingly used modality in the treatment of chronic photodamage and facial rhytides. Because this is a new and emerging modality, it is important to recognize and characterize postoperative complications in order to improve postoperative care and outcomes. We report a case of delayed purpura arising 4 days after fractional ablative resurfacing with a fractionated CO2 laser in a patient taking ibuprofen.

A 52-year-old woman presented for follow-up 5 days after fractionated CO2 laser therapy of the entire face for rhytides. The Fraxel Re:pair (Reliant Technologies Inc., Mountain View, CA) laser was used with settings of 70 mJ/cm², 20% density, 6.87 kJ total. After experiencing moderate discomfort the first 2 days postoperatively, she reported mild itching and continued mild pain on postoperative days 3 and 4. She relieved these symptoms by gently rubbing the skin and taking ibuprofen 600 mg twice daily on day 3 and day 4. On day 4, she reported having new small red to purple discolorations on the skin of her face. Physical examination revealed nonblanchable 1-mm purpuric macules on the forehead and nose (Figure 1). She was instructed to discontinue ibuprofen and given triamcinolone 0.1% to use for itching as needed. One week later, her purpura and all symptoms were resolved.

We conclude that nonsteroidal anti-inflammatory drugs (NSAIDs) may be the cause of delayed purpura in patients who have undergone fractional ablative therapy. We recommend that patients avoid all NSAIDs, aspirin, and other blood thinners such as vitamin E and ginkgo biloba in the postoperative period unless medically indicated for another reason.

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The Fraxel Laser user to perform treatment was loaned by Reliant Technologies, Inc. Mountain View, CA