

## LETTER TO THE EDITOR

# Localized argyria from silver nasal piercing unresponsive to Q-switched laser successfully treated with a 1064 picoseconds laser

A 23-year-old woman with a 1-year history of a grayish silvery macule on the right nasal ala, following a silver jewelry nose piercing, presented to the laser clinic for consideration of, at her request, ablative laser treatment for removal of what she described as a discoloration that is having a profound effect on her psychological well-being. The macule was asymptomatic and had been unsuccessfully treated prior to her presentation with a 1064 nm Q-switched laser though the exact parameters were not available as this was performed in a different city. Treatment was performed with the 1064 nm wavelength of a picoseconds laser (Picoway; Candela) using the nonfractional zoom handpiece with a 4 mm spot, with 1.8 J/cm<sup>2</sup> in 2 passes. There was erythema as an endpoint. The macule gradually disappeared in <2 weeks with no scarring (Figure 1).

Localized argyria is a gray-silvery colored macule or a patch that results from cutaneous contact to objects containing silver metal.<sup>1</sup> It is usually asymptomatic and in dermatology is seen mostly following piercings. It has also been seen following silver nitrate applications and acupuncture.<sup>2</sup> Previous reports have shown efficacy of Q-switched 1064 nm Nd:YAG laser in localized argyria; however, this was unsuccessful in our patient.<sup>3</sup> Treatment with a picoseconds laser was successful in one setting with no recurrence after 12 months.

The picoseconds lasers generate ultrashort pulses in a trillionth of a second leading to a predominance of a photoacoustic effect

rather than a photothermal one. While the efficacy of picoseconds lasers in tattoos is beyond doubt, superiority in the treatment of benign pigmented conditions compared to Q-switched nanosecond lasers was reported in split-face studies.<sup>4,5</sup> Reports of conditions unresponsive to the Q-switched nanosecond lasers, which subsequently cleared with the picoseconds laser—as is the case in our patient—further proves the superior efficacy of the picoseconds lasers.<sup>6</sup>

## CONFLICT OF INTEREST

None.

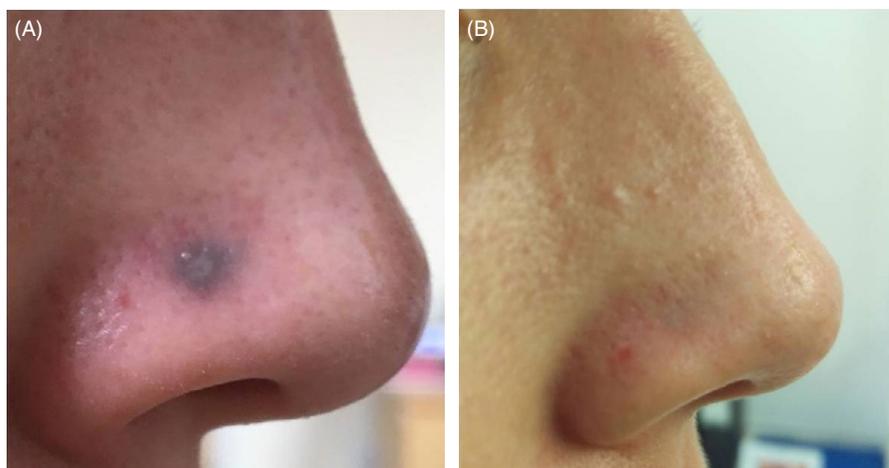
Firas Al-Niaimi MD, MRCP, EBDV 

*Dermatological Surgery & Laser Unit, St John's Institute of Dermatology, St Thomas' Hospital, London, UK*

## Correspondence

*Firas Al-Niaimi, Dermatological Surgery & Laser Unit, St John's Institute of Dermatology, St Thomas' Hospital, Westminster Bridge Road, London SE1 7EH, UK.*

*Email: firas55@hotmail.com*



**FIGURE 1** A, Localized argyria prior to laser treatment. B, Clearance of localized argyria with the picoseconds laser

## ORCID

Firas Al-Niaimi  <https://orcid.org/0000-0002-0684-4322>

## REFERENCES

1. McClain CM, Kantrow SM, Abraham JL, Price J, Parker ER, Robbins JB. Localized cutaneous argyria: two case reports and clinicopathologic review. *Am J Dermatopathol*. 2013;35(7):e115.
2. Park MY, Lee JS, Jin HJ, et al. Localized argyria: troublesome side-effect of acupuncture. *J Eur Acad Dermatol Venereol*. 2018;32(2):e62-e65.
3. Griffith RD, Simmons BJ, Bray FN, et al. 1064 nm Q-switched Nd:YAG laser for the treatment of Argyria: a systematic review. *J Eur Acad Dermatol Venereol*. 2015;29(11):2100-2103.
4. Lee MC, Lin YF, Hu S, et al. A split-face study: comparison of picosecond alexandrite laser and Q-switched Nd:YAG laser in the treatment of melasma in Asians. *Lasers Med Sci*. 2018;33(8):1733-1738.
5. Yu W, Zhu J, Yu W, et al. A split-face, single-blinded, randomised controlled comparison of alexandrite 755 nm picosecond laser versus alexandrite 755 nm nanosecond laser in the treatment of acquired bilateral nevus of Ota-like macules. *J Am Acad Dermatol*. 2018;79(3):479-486.
6. Forbat E, Al-Niaimi F. The use of picosecond lasers beyond tattoos. *J Cosmet Laser Ther*. 2016;18(6):345-347.