

## LETTER TO THE EDITOR

## Usefulness of a specialized « tattoo » consultation in a tertiary care hospital: a one-year experience

### Editor

Seventeen per cent of the French have tattoos.<sup>1</sup> The frequency of tattoo complications ranges broadly from 2% to 27%.<sup>2-4</sup> The management of these complications may leave the physician puzzled. Besides, physicians could feel uncomfortable at properly advising patients with chronic conditions who wish to have a tattoo.<sup>5</sup> We report the 1-year experience of a monthly consultation in Bichat-Claude Bernard University Hospital in Paris.<sup>6</sup> The consultation admits patients with tattoo complications and also, on a case-by-case basis, patients with medical conditions before tattooing. We do not provide laser removal services.

We prospectively collected the data of all the outpatients who attended the consultation between May 2017 and June 2018 (12 months). Sixty-four consultations were carried out (median: 6/month) for 52 outpatients (27 men, 52%). The median age was 33 years (16–80 years). Tattoo types were permanent tattoos (94%, n = 49), permanent make-up (4%, n = 2) and henna (2%, n = 1). Tattoos had been performed outside tattoo shops (“home tattooing”) in 7 cases (16%) and during a tattoo convention in one (2%). Five patients had their tattoo abroad. Two



**Figure 1** Spectrum of tattoo complications. (a) Eczematous and lichenoid sunlight-triggered tattoo allergy to orange, (b) mycobacterial infection on the grey shades of a tattoo performed in Cape Verde, (c) ulcerated keratoacanthoma and lichenoid red tattoo reaction, (d) infection by *S aureus* after tattooing, (e) nodules on a red tattoo during sarcoidosis, (f) lympho-histiocytic tattoo reaction to red and orange, (g) lichenoid tattoo reaction to violet.

patients had immunomodulatory treatments during tattooing (methotrexate and adalimumab for spondylarthritis; interferon beta for multiple sclerosis). Sixty-six per cent (n = 34) presented

**Table 1** Reasons for referral and diagnosis for 52 outpatients

	n (%)
Outpatients attending for a past or present tattoo complications <sup>a</sup>	44 (85)
Allergy to an ink color <sup>b</sup>	15 (33)
Warm color (red, orange, yellow)	12 (73)
Cold color (blue, violet)	3 (27)
Infection	8 (18)
Pyogenic infection ( <i>S. aureus</i> )	1 (2)
Environmental nontuberculous mycobacteria <sup>c</sup>	3 (7)
Viral warts	1 (2)
Possible pyogenic infection <sup>d</sup>	3 (7)
Foreign body granuloma/sarcoidosis	4 (9)
Sarcoidosis	1 (2)
Isolated pruritus on a part or whole tattoo	4 (9)
Scars on tattoos; repetitive delay in healing after tattooing	4 (9)
Dyschromia	4 (9)
Hyperpigmentation (after henna tattoo)	1 (2)
Color fading (permanent make-up)	1 (2)
Poor cosmetic permanent make-up result	1 (2)
Post-inflammatory hyperpigmentation after attempt of tattoo removal	1 (2)
Tumors	2 (4.5)
Solitary keratoacanthoma	1 (2)
Eruptive keratoacanthoma <sup>e</sup>	1 (2)
Miscellaneous	4 (9)
Lipoma in the vicinity of the tattoo	1 (2)
Tattoo blowout	1 (2)
Localized pain	1 (2)
Melanocytic naevus covered by a tattoo	1 (2)
Unspecified	6 (14)
Outpatients attending before a first tattoo	8 (15)
Scar camouflage	3 (37.5)
Acne/folliculitis	2 (25)
Chronic urticaria, dermatographism	1 (12.5)
Past allergy to nickel, chrome and cobalt	1 (12.5)
Fear of tattoo complications	1 (12.5)

<sup>a</sup>One patient may present here several diagnosis.

<sup>b</sup>Among those patients, one had a generalized lichenoid reaction/lichen planus and two patients had sunlight triggered reaction on orange/yellow color.

<sup>c</sup>Two patients had been tattooed in the same tattoo parlour.

<sup>d</sup>Tattoos were normal or with scars upon examination. Diagnosis was considered as possible upon the story of the patient and if available patients own tattoo pictures.

<sup>e</sup>The patient presented also an lichenoid tattoo reaction to the red color of the tattoo along with eruptive nodules.

with active symptoms on one tattoo or more, and 19% (n = 10) had an asymptomatic tattoo with or without visible sequelae (scarring or dyschromia) (Fig. 1). The reasons for consultation and diagnoses are summarized in Table 1. Briefly, main diagnoses included tattoo allergy (33%) and infection (18%). Ultrapotent corticosteroid ointments or topical tacrolimus was applied for tattoo allergies and granulomas, while long-term antibiotics were indicated for mycobacteria infection. Keratoacanthomas were removed surgically, including the complete excision of the whole tattoo in a case. The remaining 15% of outpatients (n = 8) sought for advice before a first tattoo.

Patients were satisfied with this specialized consultation for either diagnosis and treatment or advice. This consultation is unique in France.<sup>6</sup> To our knowledge, there are currently three other 'clinics' of this kind in Copenhagen,<sup>7</sup> Amsterdam<sup>8</sup> and New York. The 'tattoo clinic' in Copenhagen reported its experience of 405 patients between 2008 and 2015.<sup>7</sup> The number of patients (50/year) and distribution of complications (allergic reactions, 37%; bacterial infections 11%) were similar.<sup>7</sup> Sixteen per cent of our patients reported complications on 'home-made' tattoos, even though they were allegedly done by 'professional' tattooists. This figure was similar in Denmark (14%).<sup>7</sup> They did not present only infection, but also variously scarring, delay in healing, colour allergy, keratoacanthoma or itch. A better information of the public about the increased risks of home tattooing is warranted.

The median number of monthly consultations was rather 'low' in comparison with the number of tattooed individuals. We estimated that 176 000 tattooed individuals could present symptoms in France, as 1.9% of the respondents in our study reported chronic symptoms on at least one tattoo.<sup>1</sup> Our consultation is subjected to selection bias as patients with most disabling symptoms are looking for advices and usually live at a reasonable distance from Paris. During the same 12 months, one of us (NK) also collected 38 tattoo complications from France through e-mail notifications, either via physicians, tattoo artists or tattooed individuals. Studies based on self-reports may excessively detect

minor symptoms and complaints that have little impact and do not need any management.<sup>3</sup>

In conclusion, a specialized 'tattoo' consultation displayed a variety of tattoo complications. It has its place in a university hospital setting. A monthly pace seems currently sufficient despite tattooing popularity. We hope that additional consultations will open in other parts of France and Europe to better address this issue and research purposes as well.

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