

CLINICAL REPORTS

Liberating more than light: Laser removal of branding tattoos is impactful in the recovery of sex trafficking survivors

Emily L. Guo MD¹  | Elizabeth Kream MD² | Alisha Merlo BA^{3,4} | Paul M. Friedman MD^{1,5,6}

¹Dermatology & Laser Surgery Center, Houston, Texas, USA

²Department of Dermatology, University of Illinois Chicago, Chicago, Illinois, USA

³San Diego Stop Traffic Walk, San Diego, California, USA

⁴Coastline Dream Center Stop Traffic Outreach, Carlsbad, California, USA

⁵Department of Dermatology, University of Texas, McGovern Medical School, Houston, Texas, USA

⁶Department of Dermatology, Weill Cornell Medical College, Houston Methodist Hospital, Houston, Texas, USA

Correspondence

Paul M. Friedman, MD, Dermatology & Laser Surgery Center, 6400 Fannin St, Suite 2720, Houston, TX 77030, USA.
Email: drpaul@dermlasersurgery.com

Abstract

Objectives: Sex trafficking involves the use of force, fraud, or coercion to compel another person to engage in commercial sex acts. In 2020, 16,658 individuals were identified as sex trafficking victims in the United States, with thousands more not reported. Many victims are branded by their traffickers with tattoos conveying ownership, including names, symbols, and barcodes. We have partnered with local non-profits in Houston supporting sex trafficking survivors by providing pro bono laser tattoo removal, however we believe there is a greater need at a national level to support these survivors, allowing them to reclaim their bodies.

Methods: An online survey aimed at assessing the need and potential impact for pro bono branding tattoo laser removal services was distributed to United States organizations that support sex trafficking survivors.

Results: Forty organizations based in the Northeast (15%), Midwest (20%), South (45%), and West (20%) responded. Organizations support on average 81 survivors annually, ranging from 3 to 600 survivors, and estimate that 47% of survivors have branding tattoos. Among survivors with branding tattoos, approximately 67% were identified at an appropriate recovery stage to undergo laser removal. On a scale of 1–10 with 10 being the most impactful on recovery, removal of branding tattoos received an average impact score of 9.2. On a scale of 1–10, with 10 being the most need, pro bono services for laser removal received an average need score of 9.1. Qualitative responses provided several insights: laser removal may be associated with enhanced healing compared to tattoo cover-up, and survivors frequently move during their recovery process thus a successful removal campaign would require a nationwide network of partnering laser surgeons.

Conclusions: Approximately 1 in 2 sex trafficking survivors are estimated to have branding tattoos and the removal of these tattoos is recognized as highly impactful on recovery. We propose a philanthropic campaign which involves the American Society for Laser Medicine and Surgery (ASLMS) establishing a national directory to connect sex trafficking survivors seeking removal of branding tattoos with interested ASLMS board-certified physician members.

KEYWORDS

branding tattoos, human trafficking, sex trafficking, tattoo laser, tattoo removal

INTRODUCTION

Sex trafficking involves the use of force, fraud, or coercion to compel another person to engage in commercial sex acts. When a minor younger than 18 is used to perform a

commercial sex act, it is a crime regardless of any use of force, fraud, or coercion. For many people, the thought of human trafficking involves images of kidnaping and forceful capture by strangers, however traffickers may be romantic partners, relatives, or other acquaintances and often do not

This abstract was accepted for presentation at the 41st ASLMS Annual Conference.

need to use physical measures to restrain their victims.¹ Instead psychologically manipulative methods, termed “grooming,” are used to gradually entrap victims.

Exact and thorough data collection regarding human trafficking is challenging given the inherent underground nature of this crime. According to the International Labor Organization, globally there are an estimated 4.8 million victims of sex trafficking, with children making up more than 20% of that number.² In the United States in 2020, 16,658 individuals were identified as sex trafficked persons, with thousands more not reported.³ Human trafficking is a \$150 billion per year industry with the average profit of a sex trafficked person generating \$100,000 annually.⁴

Many victims of sex trafficking are branded by their traffickers with tattoos conveying ownership, including names, symbols, initials, and barcodes. We have partnered with non-profit organizations local to our practice in Houston supporting sex trafficking survivors in their recovery through pro bono laser branding tattoo removal. We have witnessed the impact in which tattoo removal can help survivors reclaim their bodies and believe there is a greater need at a national level to support survivors. Herein, we conducted a survey study to assess the needs and impact of laser branding tattoo removal as identified by United States organizations that support sex trafficking survivors in long-term rehabilitation and recovery.

MATERIALS AND METHODS

An eight-question online needs and impact survey aimed at assessing the need for pro bono branding tattoo laser removal services was distributed to United States organizations that support sex trafficking survivors (Figure 1). Participating organizations were identified through collaboration with the National Trafficking Sheltered Alliance as well as locally known programs. The survey was distributed to 97 organizations in total.

RESULTS

Forty organizations based in the Northeast (15%), Midwest (20%), South (45%), and West (20%) responded (41% response rate) (Figure 2). Organizations support on average 81 survivors annually, ranging from 3 to 600 survivors, and estimate that 47% of survivors have branding tattoos (Table 1). Among survivors with branding tattoos, approximately 67% were identified at an appropriate stage of recovery to undergo laser tattoo removal. Based on these numbers, we can estimate that there are approximately 1020 survivors yearly across the United States that could benefit from laser removal of branding tattoos. On a scale of 1–10, with 10 being the most need, pro bono services for laser removal received an average need score of 9.1. On a scale of 1–10, with 10

being most impactful on recovery, removal of branding tattoos received an average impact score of 9.2.

Qualitative responses from organizations also provided several insights, including that laser removal may be associated with enhanced healing as compared to tattoo cover-up (Figure 3). Additionally, survivors frequently move during their recovery process, thus a successful trafficking tattoo removal campaign would require a nationwide network of partnering laser surgeons.

DISCUSSION

Indicators of sex trafficking

Sex trafficking indicators include both observable findings, also known as red flags, and risk factors. Red flags

1. What is the name of your organization?
2. What city and state is your organization located in? If there are multiple locations, please include all cities/states.
3. How many survivors does your organization work with each year?
4. What approximate percentage of survivors that your organization works with have trafficking branding tattoos?
5. Of the survivors with trafficker branding tattoos, approximately what percentage of them are in a stable and safe place to undergo laser tattoo removal?
6. On a scale of 1-10, with 1 being the least impact and 10 being the most impact, how would you rate the impact that laser removal of trafficker branding tattoos has on the recovery of a sex trafficking survivor?
7. On a scale of 1-10 with 1 being the least need and 10 being the most need, how would you rate the need for pro bono services for laser removal of trafficker branding tattoos?
8. If you have any additional comments, please leave them below.

FIGURE 1 Eight-question online needs and impact survey

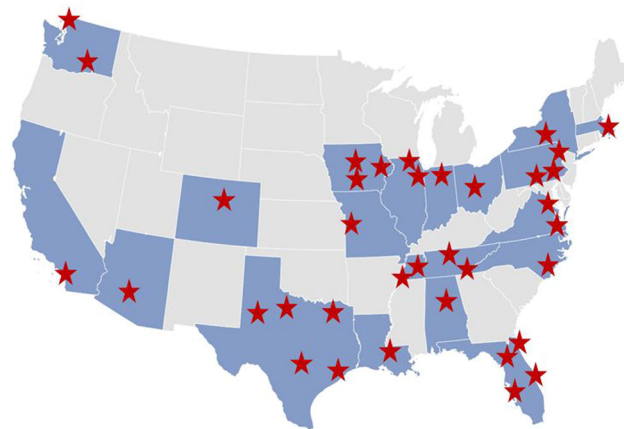


FIGURE 2 Survey respondents distributed across the United States

TABLE 1 Survey results regarding the needs and impact of pro bono laser branding tattoo removal distributed to United States organizations supporting sex trafficking survivors

Needs and impact survey results	
Number of responses	40 Responses
Survivors supported annually	Average of 81 survivors per program (3–600 survivors per program) 3240 survivors total
Average approx. % with branding tattoos	47% (0%–90%)
Average approx. % ready for removal	67% (10%–100%)
Survivors that could benefit from pro bono tattoo removal per year	1020 Survivors
Survivor recovery need score (scale 1-10)	9.1 (5–10)
Survivor recovery impact score (scale 1-10)	9.2 (5–10)



FIGURE 3 Examples of qualitative responses received in our survey in response to Question 8

may be medical (e.g., multiple sexually transmitted infections, pregnancy/abortions, substance abuse, physical trauma with inconsistent history), physical (e.g., signs of torture, burns, branding tattoos), or behavioral (e.g., appearing fearful, hostile affect, accompanied by a controlling partner).^{5,6} Underscoring the need for healthcare providers to gain competency in identifying sex trafficking indicators, one study found that 88% of sex trafficking victims had contact with a healthcare provider while being exploited, most commonly in a hospital/emergency room or Planned Parenthood, however less than 20% of these trafficked persons reported that their provider knew they were being trafficked.⁷ Healthcare encounters are often rare timepoints when victims may be separated from their traffickers, and serve as an opportunity for both identification and intervention. While social service providers identify behavioral symptoms as the most commonly identified red flags, recognizing mental and psychiatric indicators is often predicated on an intimate dialogue, multiple visits, and overcoming the mistrust that many victims may exhibit towards healthcare personnel and law enforcement.⁸ On the other hand, physical red flags can be readily identified without lengthy questioning or multiple visits.

A 2021 comprehensive narrative review sought to identify dermatologic signs reported in trafficking and found that tattoos, brandings, rashes, and bruises are most commonly seen in sex trafficking victims, whereas

deep cuts, burns, and skin injuries are more typical of labor trafficking victims.⁹ Other physical signs of sex trafficking include malnutrition and an atypical presentation of belongings such as multiple phones, minors with hotel keys, or large amounts of cash.¹⁰

Branding tattoo characteristics

While commonly described as an indicator of sex trafficking, tattoos may be a confusing indicator for healthcare providers to interpret due to both the high prevalence of tattoos in the general public and the difficulty discerning sex trafficking tattoos from voluntary tattoos.¹¹ Some characteristics of tattoos that suggest a healthcare provider ask further questions include poor quality amateur tattoos, location in either highly visible areas (such as the neck, face, or breasts) or hidden private areas (such as the genitals, eyelids, or oral mucosa), depictions of wealth (gold bars, currency symbols, crowns, barcodes, moneybags) or weapons (guns or knives, which can be confused with gang or crime tattoos), and names or initials (especially when used possessively) (Figures 4–7).^{12,13} Additionally, any tattoo in a minor should be questioned, as tattoos are more common in sexually exploited children (48%) as compared with other pediatric victims of sexual abuse (5%).¹⁰ Simple open-ended questions such as “Tell me

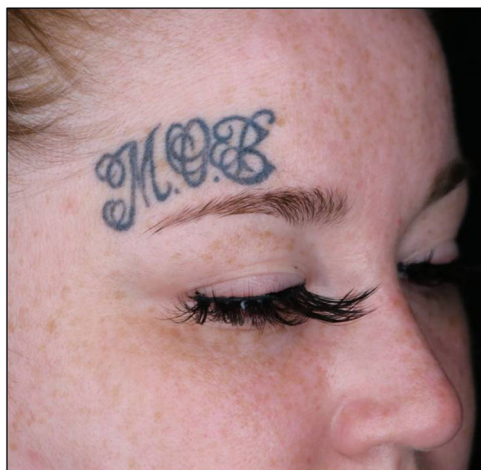


FIGURE 4 A branding tattoo of letters M.O.B on the right forehead, a highly visible area. This patient reports that in her recovery process, she has had difficulty with obtaining a job due to her tattoo. Photograph courtesy of Paul M. Friedman, MD.



FIGURE 5 A large branding tattoo across the forearm with the words “Marlo Cash,” indicating both possession and a source of wealth for this patient’s trafficker. Photograph courtesy of Paul M. Friedman, MD.



FIGURE 6 A branding tattoo with the name “NINO,” the patient’s trafficker, across the lower back. Before and after five treatments with 1064 nm picosecond laser and perfluorodecalin patch. Photographs courtesy of Paul M. Friedman, MD.

about your tattoo” can be an easy way to start a dialogue.

Path to recovery and reclaiming autonomy

Once sex trafficking victims are identified, the path to recovery begins. Sustainable recovery involves more than

clothing and food and it is not a linear process; survivorship often involves multiple attempts at escaping the trafficker. A variety of organizations support the recovery and rehabilitation of survivors in the different stages of recovery which range from street outreach, emergency care, and initial assessment, to more stable stages such as transitional and restorative recovery. The earliest stage of recovery, termed the crisis stage, involves interventions that address a survivor's most basic needs such as establishing a sense of safety, and tending to urgent medical and legal needs.

Given that laser tattoo removal is an elective medical procedure requiring multiple visits, these post-trafficking services are most appropriate at a later more stable stage. As with all tattoo removal consultations, patient education is critical to set appropriate expectations for treatment. For simple, black tattoos, four to six treatment sessions can be expected, though more treatments may be required depending on a variety of factors including amateur or professional tattoo placement, colors, size, and laser technology utilized. The two patients in our practice who have completed debranding treatment and are satisfied with the outcome both required five treatment sessions total for their black tattoos, as depicted in Figures 6 and 7.

Alternatively, some survivors opt for secondary tattoo cover up of their branding tattoos. Survivor's Ink is a resource in the United States and Canada that connects survivors with tattoo artists and providing funding to obtain a cover up tattoo of their personal choosing.¹⁴ Reiterating the importance of debranding at a stable stage of recovery, Survivor's Ink requires that survivors must be actively participating in rehabilitation program and in recovery for at least 6 months, preferably 1 year. Qualitative responses from our survey indicate that laser tattoo removal may be preferable to tattoo cover-up, however healing requires reclaiming autonomy so it is important to let survivors elect whether they prefer tattoo cover-up or tattoo removal when they are interested and ready for debranding. Survivors should be educated that tattoo cover-up may make subsequent laser tattoo removal more difficult due to increased density of ink or variable colors used.

Role of physicians in laser tattoo removal

Identifying board-certified physicians with expertise in the safety and efficacy of laser tattoo removal is paramount in the treatment of branding tattoos, especially given that sex trafficking survivors have already endured considerable trauma. A study by Suggs et al.¹⁵ found that most patients who present for corrective laser tattoo removal after adverse events or lack of efficacy from outside providers were previously treated by a nonphysician operator (72.2%) in a nonmedical setting (70.6%). 78.9% of the patients had

FIGURE 7 A branding tattoo with the initial “R” on this patient’s left ring finger, indicating possession. Before and after five treatments with 1064 nm picosecond laser and perfluorodecalin patch. Photographs courtesy of Paul M. Friedman, MD.



experienced adverse events from previous treatments, including scarring (53.3%), hypopigmentation (46.7%), blistering (20.0%), and paradoxical darkening (20.0%). These statistics are congruent with another survey study regarding experiences with medical spas and complications.¹⁶ Inadvertently exchanging a branding tattoo for a permanent scar would not only be a devastating adverse event but could potentially impede recovery. Establishing a network of expert laser surgeons can help ensure safe and efficacious treatment for this vulnerable population.

National registry

To the best of our knowledge, no national program or database exists to connect survivors with physicians that provide laser tattoo removal. We propose a philanthropic campaign within the American Society of Laser Medicine and Surgery (ASLMS), the leading society for laser surgeons, which would establish a national directory to connect sex trafficking survivors seeking safe and effective removal of branding tattoos with ASLMS members. We hope to establish trauma-informed training for participating physicians within this initiative to optimize the physician-patient relationship. A similar philanthropic directory, *New Beginnings*, exists within ASLMS and was launched in 2014 to benefit cancer survivors in the removal of radiation tattoos.¹⁷

A campaign that provides sex trafficking survivors with tattoo removal services would not only be helpful for recovery, it could also provide the unique opportunity to create a repository of sex trafficking tattoo images. Several publications have commented that few resources include photographs.^{9,13} Consenting survivors could have their tattoos photographed before removal, and an archive of various trafficker branding tattoos could be provided to healthcare providers to help improve identification competency.

Limitations

Limitations of our study include that this survey was conducted among organizations supporting sex trafficking survivors regarding their perceived need and impact of branding laser tattoo removal, rather than the survivors themselves. However, given the vulnerable nature of this population we decided for this initial preliminary study to focus on the organizations, and we hope that this initiative will provide an avenue for future studies to learn more about the survivors' needs for recovery. Our response rate of less than 50% may be attributed to the fact that the National Trafficking Sheltered Alliance organizations invited to complete the survey support survivors in variable aspects of the path to recovery. For organizations with a focus on the initial stages of recovery rather than rehabilitation and long-term recovery, tattoo removal may not be a priority.

CONCLUSION

While the covert nature of sex trafficking makes it difficult to glean data on its prevalence, our study suggests that approximately 1 in 2 sex trafficking survivors have branding tattoos. These branding tattoos are underrecognized physical indicators of sex trafficking and educating healthcare providers on branding tattoo characteristics could enhance identification and intervention of sex trafficked persons. Our study also illuminates that the removal of branding tattoos is highly impactful on recovery and may be preferred over tattoo cover-up. We propose that ASLMS launch a national directory to connect sex trafficking survivors seeking pro bono removal of branding tattoos with board-certified physician members. We hope our findings and proposed campaign sparks dialogue and informs our colleagues how we can play an important and life changing role in

addressing the pervasive and often misunderstood problem of sex trafficking.

ACKNOWLEDGMENT

We thank Rachel Karper, Melissa Yao, and Zachary Boyd with the National Trafficking Sheltered Alliance for assisting us with distribution of our survey.

ORCID

Emily L. Guo  <http://orcid.org/0000-0002-9538-5489>

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How to cite this article: Guo EL, Kream E, Merlo A, Friedman PM. Liberating more than light: laser removal of branding tattoos is impactful in the recovery of sex trafficking survivors. *Lasers Surg Med*. 2023;55:61–66. <https://doi.org/10.1002/lsm.23612>