

# First Report of Nonpsychotic Self-Cannibalism (Autophagy), Tongue Splitting, and Scar Patterns (Scarification) as an Extreme Form of Cultural Body Modification in a Western Civilization

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As part of her current lifestyle, a 28-year-old Caucasian woman routinely injures and allows subsequent healing of her skin and other tissues. Her body modifications include a "split tongue" (a tongue split to the base), which does not interfere with speaking and eating. Other modifications include large scarification patterns produced by branding and cutting. This woman has been known to eat parts of her skin that were previously cut out of her body. She also performs "needle play" by allowing medical syringe needles to be lodged temporarily under her skin. The patient had a normal childhood, is currently employed full-time as an office manager, and is psychologically stable. Although one other case of self-induced penoscrotal hypospadias is known, this is the only report of extensive, nonpsychotic, autodestructive behavior. However, this may not be the case in the future as an increasing number of young individuals have become interested in body modifications.

**Key Words:** Self-inflicted wounds—Autophagy—Body modification—Scarification—Tongue splitting—Youth subcultures.

During an ongoing interview series related to the medicolegal aspects of behavioral patterns in sociocultural subgroups of people <30 years of age (1,2), I documented the life history and current status of a 28-year-old Caucasian woman (S.E.). As part of her lifestyle, she commonly practices "body modification" by injuring and allowing subsequent healing of her skin and other tissues. These body modifications are easily concealed by her clothing and hair. During our research, we discovered that S.E.'s behavioral pattern is similar to that of other people in the same age group and younger. Therefore, it seems necessary to strengthen the awareness of such observed injuries to address a possible future trend in body modification.

To our knowledge, the case reported in this paper is the only one of severe, nonpsychotic body modification in the Western culture that is documented in the medical or psychological literature, with the exception of a case involving self-induced penoscrotal hypospadias (3).

## RESEARCH METHOD

Humans are the focus of interest in forensic and legal medicine. However, systematic monitoring of the daily life of humans, and especially predesigned changes of experimental parameters concerning their lifestyle, is practically impossible. Therefore, such study is frequently replaced by case observations. Depending on the number of observations, case studies can later be compiled using mathematical reanalysis of raw data obtained from each case (4).

In the context of professional criminalistic research, this article focuses on the sociocultural behavior of persons under the age of 35 years. This

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This study was performed while the author was employed at the New York City Office of Chief Medical Examiner (OCME). However, all of the research, including the preparation of this manuscript, was done independently by the author during the time he was not obligated to the OCME. This study was not performed in connection, cooperation, or on behalf of any U.S. federal, state, or local government agency. This was part of an ongoing study on prevailing trends among subculture youth communities.

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age group is largely underrepresented in forensic studies but displays many lifestyle-related behavioral patterns that may puzzle even experienced forensic pathologists, criminalists, and law enforcement officials. Therefore, we use a semi-quantitative approach that documents not only the behavior but also the *Zeitgeist*. This research method is based on extensive interviews, partially as pioneered in early sex research (5). A modification of this method, without a rigid structure and compilation of questions but including verification of sources, is currently being used in scientific sociology (6).

All of our interviews were conducted in a comfortable and reasonable environment. Over a 9-month period, we recorded >24 hours of interviews. This was complemented by actual, on-site visits of relevant locations in New York City and by viewing video recordings of the body modification procedures performed on S.E.

#### STATE OF INTERVIEWEE'S BODY MODIFICATIONS

At the age of 16 years, S.E. started to continuously scrape the interior of her hands until a small bleeding wound appeared; a scar ~2 mm in length is still visible. Three years later, she began to cut her wrists to produce triangle-shaped scar patterns (~7 × 5 cm). During these procedures, S.E. clearly avoided damaging her blood vessels, which she could see and feel while cutting. The scar patterns on her wrists are still clearly visible (Fig. 1).

S.E. relocated to New York City at the age of 26 years and, with help from her male friends, who

were professional piercers, she became interested in having up to 150 16- to 27.5-gauge medical syringe needles temporarily inserted under the skin of her back and front torso, including her nipples and clitoral hood. She also became transfixated (i.e., permanently pierced) with removable jewelry such as rings and short sticks at the labia majora, clitoral hood, nipples, and tongue (~2 cm from the tip).

At the age of 27 years, S.E. underwent surgery to split her tongue. She had prior knowledge of tongue splitting performed in an extremely painful procedure using fishing line pulled through a pierced hole in the center of the tongue and slowly tightened over a period of 3 weeks (7). Attracted to this type of body modification, S.E. approached a maxillofacial surgeon who was known to perform tongue splitting. Using a laser beam, the surgeon split her tongue 4 cm from the tip. After a few weeks, the tongue healed together from the base. The surgeon then performed maintenance operations in June 1998 and again in September 1998 (Figs. 2 and 3) to keep the tongue split apart. The wounds healed within a few days without complications. In addition, having a split tongue does not interfere with eating or speaking, and S.E. quickly adapted to this oral modification.

Another body modification procedure performed by S.E. was to remove strips of skin to produce large scar patterns, the largest of which stretches in a zigzag and diamond shape from left to right across her entire back. Additionally, she has another scar pattern that stretches over her front abdominal region (Fig. 4). The width of the scars are ~7 mm. During one of the cutting sessions, which are always performed without anesthetic (including



**FIG. 1.** Nonsuicidal triangle-shaped scar pattern produced by the patient at the age of 19 years.



**FIG. 2.** Healed tongue splitting. Both tongue parts can be moved separately and do not interfere with eating or speaking.

alcohol), S.E. consumed some of the tissue, with the largest piece measuring  $\sim 10\text{ cm} \times 7\text{ mm}$ . After chewing on the skin, which she could not bite through, she swallowed the piece of tissue.

Other body modifications performed on S.E. include tattoos and brandings (i.e., scarification patterns caused by induction of heated metal forms). During all of the aforementioned body modification procedures, S.E. showed extreme control of and immunity to pain.

### PERSONAL BACKGROUND

S.E. grew up in an immigrant, middle-class family from a town with approximately 1 million inhabitants in the western region of the United States. In addition to her regular school education, S.E. also attended Sunday school until the age of 15 years. Later, she relocated to another state and finished college with a Bachelor of Arts (B.A.) degree in Sociology. S.E. then moved to New York City, where she currently works as a full-time office manager. Her current friendships are focused on people involved in body modification (e.g., tattoos, piercing, branding, needle play). To maintain a relationship, S.E. has performed sadomasochistic acts but has no personal interest such activities. Although she is psychologically balanced, S.E. may be classified into the schemes of attention seeking

and self-caring behavior (8,9). Peer pressure may also play a role in her ongoing body modifications.

S.E. has constant and stable contact with her family. She has two older brothers; one is a physician, and the other is an engineer. Her parents were never divorced, and the family did not move during S.E.'s childhood or adolescence. The entire family disapproves of her body modifications, and to try and comprehend such behavior, they have openly discussed the possibility of psychological disturbances and even sexual abuse in S.E.'s early childhood or adolescence. However, there is no evidence pointing to such influences. She never performed presuicidal parallel cuttings on her skin or any other related modifications, and she is not involved in any religious or pseudoreligious activity.

### CURRENT STATUS

S.E. lives in New York City's East Village, which is a highly multicultural area and the primary focus of tourism for many young visitors between the ages of 15 and 30 years. A large number of tattoo and piercing studios, as well as comic book, leather, fantasy, and role-playing game shops, are concentrated here. This area is the successor of Greenwich Village and Chelsea, which are historically known to have been the avant garde parts of New York City.

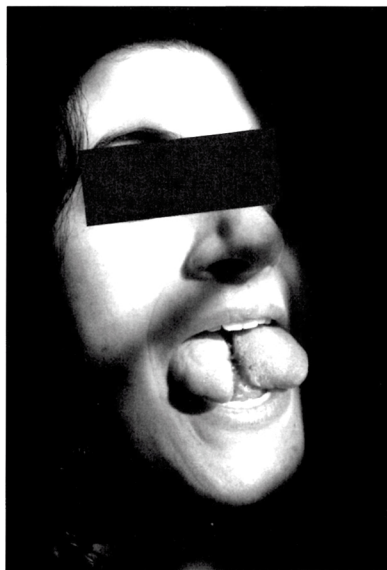


FIG. 3. State of tongue 1 day after third operation (1998): swollen but fully functional.

### HISTORICAL NOTE

Body modification behavior is widely documented in many native populations, including those of Australia, North and South America, and Southeast Asia (3,10–12). Ancient rituals, such as the Indian sundance, involve the insertion of flesh hooks under the skin and slowly removing them. The Mayas performed penis perforations, as documented on their engravings (3). Among some Australian natives, penoscrotal hypospadias was known and performed, and in Africa, huge wooden inserts and cuttings into the facial tissue are still common practice. Additionally, clitorectomy is practiced in some small African populations but is becoming less prevalent.

In modern Western cultures, tattoos have become the best known type of body modification. The interest in tattoos has grown steadily since the time when sailors and prisoners were the primary group displaying them. It was not until the 1970s that the first tattoo conventions were held, and since the 1980s, tattoos and piercing have been rec-

ognized as a possible art form. Consequently, in some large cities in Europe and the United States, the number of piercing studios exceeds the number of possible customers (3,12,13). Today, displaying body art and body modifications are often considered to be part of a person's lifestyle.

An excellent and extensive overview of body modifications such as tattooing, piercing, spiritual use of flesh hooks, subcutaneous penis beads, and stretching of ear lobes is given in Vale and Juno (3). Currently, the cultural context of body modifications extends from urban lifestyle (as reported here), to sadomasochistic-related and sexual topics, to identification purposes in the Japanese *yakuza* Mafia, to the spiritual or meditational use of permanent and nonpermanent body modification techniques.

### A WORD ON ETHICS

The ethical implications of operations carried out by medical surgeons who perform tongue splittings are open to discussion. All physicians who are asked to perform such operations must confront the classic dilemma of performing such an unusual procedure (for pragmatic reasons) or allowing the patient to deal with his or her own desire for their own ethical reasons.

I have learned from direct observation that most members of the "mutilation scene" are not willing



FIG. 4. From top to bottom: piercing, zig-zag scar patterns, flame-like tattoo surrounding a scar produced by a "cutting" (removal of tissue).

to discuss their own desires to perform body modifications with those individuals outside of the scene. In fact, many such people will perform an operation on themselves if no professional help is offered or can be found. As previously mentioned, the first known instance of tongue splitting was performed by an adolescent female who used a length of fishing line (7). This procedure is likely to result in severe damage and infection to the tissue. However, a professional operation performed by a highly qualified surgeon would significantly reduce the chance of these unwanted side effects.

The decision between pragmatics and ethics also must be addressed from a psychological point of view. Based on comments made directly to the author by those people involved in body modification, the underlying psychodynamics of their behavior may include feelings of disconnection from their body or certain emotions. Some members of this youth subgroup further stated that this connection may be reestablished by infliction of pain or by control over their emotions. In reality, it may be difficult to decide whether body modification can be understood as self-therapy or as an "unwanted behavior."

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