

CASE AND COMMENTARY

How Should Surgeons Balance Transplantation Innovation With Acceptance of a Trauma Survivor's Appearance?

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Abstract

Clinical and ethical issues involved in counseling a patient about reconstructive surgery for a traumatic and disfiguring injury require special consideration. This article proposes prioritizing 2 considerations: (1) the influence of traumatic experiences on a survivor's cognitive processes and (2) insights into a survivor's acceptance of his or her posttrauma appearance or consent to high-risk or experimental surgery, which can be gained from dialectical behavior therapy. This article argues that these priorities should be explicitly discussed by plastic surgeons counseling patients whose appearances are altered by trauma.

Case

About 40% of Dan's face was burned in an accident many years ago. Several sites on Dan's body have also been scarred by skin-harvesting from numerous reconstructive surgeries. Although many years have passed since the accident, Dan still suffers long-term grief and feels profoundly depressed about not having a romantic partner. Dan also feels hopelessness and sadness about his surgeons having said they've exhausted traditional reconstructive options on his face. Specifically, Dan remembers his plastic surgeon once stating, "There's nothing else we can do" to improve appearance, ability to speak, or ability to eat easily.

Dan's feelings of grief, longing, hopelessness, and sadness are made even more complex by his feeling guilty about not being able to just accept his face as it is. Dan feels solidarity with other burn survivors, whom he meets occasionally at conferences and support groups, and he feels it is important to resist cultural and social pressure both to medicalize his survivorship more than necessary and to try to meet unrealistic standards of "normal" physical appearance. He feels torn between wanting to accept his appearance as it is and wanting it to be good enough for a prospective romantic partner to find attractive.

Dan has read about face transplantation in various online news sources, and he now researches the procedure with more interest. He knows that whatever aesthetic, manual, and social enhancement he could gain through a face graft would come with high costs, substantial risks, and demand for lifelong adherence to prescription medications. Dan also knows his health insurance is not likely to cover surgery costs or aftercare, but he feels it

could be worth the cost if it helps him find a romantic partner. He takes advantage of a free consultation with a plastic surgeon, Dr P, who has some experience with face transplantation, to explore his options. Dr P listens to Dan's story and wonders how best to respond to his conflicting feelings.

Commentary

Trauma exposes people to the unacceptable: safety from physical and psychological harm is not a given or is perhaps illusory. Injuries sustained in traumatic accidents leave outwardly visible physical scars, but psychological scars are often hidden. Although only physical scars fall under the purview of a plastic surgeon, both are reminders of the painful lesson that terrible things can and do happen. For Dan, a desire to have his physical appearance restored or "normalized" might not be easily disassociated from his psychological injuries, as he is distressed that his physical appearance can no longer be "improved" by reconstructive surgery. A good trauma-informed practitioner would probably begin to wonder how many of Dan's scars are psychological ones that remain unaddressed.

This commentary provides guidance—from the perspective of a clinical psychologist who specializes in traumatic disorders—on the cognitive changes associated with traumatic experiences and how they are relevant to counseling patients considering high-risk or experimental plastic surgeries.

Changes in Cognition Following Trauma

In response to a traumatic experience, relatively predictable shifts in cognition occur as people attempt to integrate that experience into their understanding of the world and their place in it.¹ In the (even distant) aftermath of a traumatic event, such as a catastrophic burn, 2 common changes in thinking style attempt to re-establish a sense of safety and predictability: all-or-none thinking (eg, "I have to either accept how I look or continue trying to change my face") and a sense of a foreshortened or bleak future (eg, "I will never find a romantic partner if I look like this"). It is also common for people who have experienced trauma to make nonspecific autobiographical future projections. That is, rather than imaging doing or even trying to do specific things, such as applying for a job or graduating from school, people who have experienced trauma report general outcomes¹ (eg, "I would not be able to handle going back to the site of the accident" or "It doesn't really matter what I try, things will go wrong").

These changes in thinking style have implications for therapy with patients recovering from traumatic events, particularly for exposure-based therapy, in which patients work to approach a previously avoided experience (known as an *exposure*) in order to regain control over their emotional reactions. It is common for them to overestimate the terror they will feel in a future situation and later to minimize how nervous they were going into that same situation, thereby defeating their sense of having faced their fear. Because I am aware of cognitive changes that follow trauma, I ask patients to carefully monitor their predictions about their responses to an exposure as well as their before-exposure ratings of distress as

they work to approach reminders of a trauma or triggers of a traumatic memory and their after-exposure ratings of distress. Over time, patients can abandon faulty catastrophic predictions their mind naturally offers up as they adjust their predictions about how tolerable different situations are likely to be based on new evidence they accumulate during therapy.

Understanding how shifts in cognitive style occur is important for plastic surgeons, particularly as they discuss treatment options for patients who have experienced trauma and weigh potential risks and benefits of surgery. Such patients are likely to overestimate risks associated with reminders of trauma and to underestimate their coping abilities or others' acceptance of their appearance.²

Recognizing Dan's Hidden Scars

In Dan's case, his predictions about his future dating prospects are particularly vulnerable to cognitive distortions. He might also experience another common trauma-related cognitive change: discounting the predictive value of positive autobiographical memories (eg, prospective dating partners in his past who had expressed interest in him even with his burn scars). Positive memories are more likely to be discounted compared to negative memories and related predictions.^{1,2} These cognitive changes account for Dan's vague, unrealistic goal for improved physical appearance as the sole means of improving his dating prospects. They also account for the hopelessness Dan experienced when he was told that no further improvement could come from traditional surgical options.

As Dr P learns Dan's history and hears his conflicting feelings, she would likely consider 2 options: advising him to consider surgery (perhaps even face transplantation) or working with him on acceptance of his current appearance without further surgeries. If Dr P agrees with Dan about the impact of his appearance on his prospects for a romantic partner, she might be guided by the principle of beneficence and favor surgery. Indeed, plastic surgeons are vulnerable to the same biases about people with disfigurements as others³ and might be more susceptible to assuming they understand a patient's goals about having an "ideal" appearance, given the frequent conversations they have with patients about treatment goals. However, if Dr P is unsure whether Dan is viewing potential benefits of a face transplant realistically, given his belief that his appearance causes his singleness, the principle of nonmaleficence could guide her to counsel Dan against surgery.⁴

In either case, by taking a [trauma-informed perspective](#), Dr P might recognize the distorted nature of Dan's all-or-nothing thinking, as well as her own bias against external scars and her desire to provide treatment that could free Dan from external reminders of his traumatic injury. Even this last approach alone, however, fails to provide a means of subverting a decision-making process framed as binary—that is, one that fails to account for the possibility that Dan could be desperate to change his physical appearance *and* be able to seek and find a romantic partner without changing it or the possibility that he could accept his current appearance *and* still make changes to it. To embrace these polarities, Dr P and Dan need to adopt a dialectical perspective.

Dialectics and Decisions

Instead of framing decision making as a choice between extremes, a dialectical approach advocates a middle path in which truths of both extremes are acknowledged and synthesized. Dialectical behavior therapy (DBT) was developed in the 1990s by Marsha Linehan, a psychologist who recognized that patients and clinicians are both vulnerable to thinking in terms of extremes when faced with the urgency and life-or-death stakes of suicidal behavior.⁵ A dialectical therapist might validate a patient's urge to escape from unbearable pain while also trying to help a patient solve problems that are making his life unbearable. In DBT, patients synthesize polar opposites in their thinking in order to change their lives; with a therapist's help, they do so by acknowledging—and, by extension, accepting—the very things, including trauma, that have made their lives intolerable. Levins and Lewontin call this synthesis of apparent opposites *dialectics*: “These are the properties of things that we call dialectical: that one thing cannot exist without the other, that one acquires its properties from its relation to the other, that the properties of both evolve as a consequence of their interpretation.”⁶

Dan's thinking suggests an unresolved dialectic. He feels torn and conflicted about his competing desires: to accept himself as he is, on one hand, and to meet an aesthetic standard that presumably will make him acceptable to a romantic partner, on the other. Desire for romantic connection is as human as the tendency to value physical attractiveness in a partner. That Dan views this desire as being in conflict with self-acceptance is evident in what he does and says. Acceptance, as Dan has been practicing it, seems conditional; that is, in the absence of a surgical option, he “has to” accept his face as is. Although the solidarity he feels with other burn survivors suggests he accepts his facial appearance as part of his history and **identity**, it is also a part of his identity he would readily shed for the chance to have a romantic relationship. What Dr P might explore with Dan is the degree to which Dan has set acceptance and change of his appearance at odds with one another.

What might synthesis look like for Dan? An ideal partner for Dan might be one who accepts his appearance and would also support his **choice for surgery**. Given Dan's focus on dating as a successful face transplant outcome and the potential influence of trauma-related cognitive biases on his decision of whether to have a face transplant, Dr P might ask Dan to describe some of his predictions and experiences up until this point: Is Dan making a prediction about being rejected based on his appearance or has rejection actually occurred on this basis in the past? What was Dan's dating history like before the accident? How has Dan's personal life been affected more generally by his injuries, multiple surgeries, and recovery? Dan's responses to these questions would help both Dr P and Dan identify polarities in his thinking about dating and his appearance.

Dialectics and Ethics

Two additional considerations are of note when taking a trauma-informed, dialectical approach to decision making with Dan. First, if Dan's thinking is sufficiently compromised by

cognitive distortions to undermine his capacity to give informed consent or refusal, this limitation should be recognized by clinicians helping him assess the appropriateness of surgery. Helping Dan confront his cognitive distortions is perhaps best done with a DBT therapeutic intervention, which Lineman calls “entering the paradox.”⁵ To enter the paradox is to acknowledge without irony that 2 opposites may simultaneously be true—that is, to reject the rightness or wrongness of any single perspective—and instead to focus on maintaining a middle path between them. Dr P must identify the type of all-or-none thinking associated with trauma-related changes in Dan’s cognition so that she can help Dan make an informed decision about surgery not unduly influenced by his cognitive distortions. Dr P can then help Dan find a middle path between changing and accepting his face in a way that overrides effects of his cognitive biases. She could advise Dan, for example, that she cannot support his consent to surgery unless he creates a loving, steady support system. This kind of response invites Dan to find a middle way in which his quality of his life is not conditional on his appearance.

Second, it might seem as though a trauma-informed, dialectical approach to Dan’s thinking and decision making should be facilitated by a psychologist or other mental health professional rather than a plastic surgeon. Dan’s negative reaction to a previous plastic surgeon’s statement (“There’s nothing else we can do’ to improve appearance, ability to speak, or ability to eat easily”) demonstrates the clinician’s failure to take a dialectical approach with Dan by exploring whether these were Dan’s or his own goals for further surgery (and particularly whether the two shared an idea of what an “improved appearance” would entail). Discussing his conflicting desires with a plastic surgeon could validate Dan’s experience of the intense societal [pressure to look “normal”](#) (which plastic surgeons are uniquely suited to acknowledge, given their livelihood) while also enabling him to see how changeable that definition is⁷ (which plastic surgeons again are uniquely suited to discuss based on shifting norms in the field). At the very least, some consideration of the impact of passing off or “turking” patients such as Dan is warranted if the main motivation is avoiding an uncomfortable discussion, as turking has a negative impact on patients’ perceptions of their care and recovery.⁸ This outcome is particularly relevant to patients with trauma histories, who are especially vulnerable to feeling abandoned and betrayed by health care institutions or individual clinicians.⁹ Taking the time to counsel Dan about how past trauma could influence his decision making about and expectations for surgery would be critical and well within a plastic surgeon’s scope of practice.

Conclusion

Patients who have experienced traumatic injuries like Dan’s need clinicians who will allow time and space to navigate paradoxes during decision-making processes. Clinicians who can help patients like Dan seek a middle path between acceptance and change can (1) avert harm by avoiding procedures that are not clinically indicated or could expose patients to unnecessary risk and (2) help patients identify and resolve conflicts generated by posttraumatic cognitive biases.

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Editor's Note

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