#### **Original Article**

### Decisional Authority' and Compliance in Cosmetic Limb Lengthening: A Reverse Patient-Consultant Role? Lies and Noncompliance and Their Role in Complications

#### **Abstract**

Introduction: Cosmetic lengthening are heavy procedures, often undervalued by patients, decided for psychological improvements of their life and not for diseases or deformities. The surgical trauma can induce a subconscious freeze stress response; at that moment, the 'emotional brain' takes over the 'rational brain' for actions. Previous trauma or archaic imprints resurge and constitute references for these actions. Rational thoughts are lost. As a result, patients take the Decisional Authority over the surgeon for treatment decisions and become non-compliant to guidelines of the surgeon who is the 'knowledgeable person' in the treatment. Reaction patterns are 'Fight', 'Flight' or 'Fright'. Materials and Methods: A series of 288 cosmetic lengthening with fully weight bearing nails pointed out the patients reaction patterns, some failures of traditional psychological and psychiatric evaluations, the need for treating previous trauma (e.g. the 'Fast-Reset' technique) and having a strong physical and psychological coaching to secure a constant result. Results: Lies, sometimes difficult to detect, and deviations from guidelines generate complications, some resulting in new surgeries. Real responsibility of the patient in complications should be evaluated. Conclusions: Separating the patient and surgeon responsibilities will help to better anticipate and support deviating patients, in order to secure a faster and optimised physical and psychological results, and a quieter Patient-Doctor relation.

**Keywords:** Bone lengthening, compliance, complication, cosmetic lengthening, fast-reset psychology, freeze stress response, intramedullary nail, lies, noncompliance, psychology, treatment adherence

#### Introduction

Managing cosmetic patients for limb lengthening is difficult, as they do surgery for comfort, not for functional or life-threatening conditions. They grow very fast, creating pain, difficulties, and strong "negative" feedback from limb sensors on the brain. Patient reactions include deception,[1] noncompliance,[2] and transfer or projection of the responsibility for pain/ difficulties to the surgeon. Often, patients' expectations show a misevaluation of the complex procedure or their capacity to cope with it.[3,4] Compliance is required for an intensive physiotherapy program that allows the recovery of motion and walking instantly and maintains them throughout the lengthening. Postoperatively, in stress conditions, patients express all primary human emotional reactions in case of heavy physical and psychological experience, which results in noncompliant, rather

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than compliance with rational thoughts. We are reviewing a continuous series of cosmetic lengthenings to understand why noncompliance occurs and its implications.

#### Our cosmetic series and unsatisfaction

We performed in 30 years 288 cosmetic lengthening (576 segments) in 265 patients with full weight-bearing femoral lengthening nails (Albizzia®, DePuy France, or Guichet® Nail, X-os, Switzerland). Two patients had one limb at a time, all other both limbs in the same procedure.

All patients had a psychological evaluation and were considered suited for the surgery with justified motivations and the expected capacity to succeed in the lengthening process. The evaluation was initially based on psychological or psychiatric consultation; then, several tests were added (Minnesota Multiphasic Personality Inventory 2 [MMPI-2], Beck Depression Inventory

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(BDI), Quality of Life Inventory (QOLI), Clinical Outcomes in Routine Evaluation (CORE), letter of motivation, and further documents to complete for assessing their capacity to understand complications and cope with them). We added more recently Graphology (this recent implementation was deemed necessary due to the potential harm the patients could bring themselves through deceptive behaviors). We decided not to offer the lengthening to patients with diagnosed psychiatric pathologies unless they are referred by psychiatrists requiring a lengthening as part of the treatment for their disorder. The entire medical and environmental history is recorded to understand motivation and risks.

Initially, patients were allowed to gradual weight-bearing over 3 weeks (1991). Now patients can walk, take stairs, and bike, and most are discharged on the day of surgery. This change is crucial for medical reasons and also addresses our patients' psychological need to regain the control of their own lives, starting with mobility and autonomy. The early empowerment of the patient's independence proved an essential protective factor during the challenging postsurgery rehabilitation.

The lengthening is performed by alternate limb rotation by the patient himself. At the very beginning, patients complained about clicks generating pain. Adjustments of the clinical follow-up with increased distraction rate, and strict physiotherapy protocols, we found that intensive physiotherapy and maintaining motion throughout the lengthening period decrease pain at clicks and allow the full course of the lengthening. Sex/initial age was 70F/152/195M/165. Average gain in the series is  $67 \pm 17$  mm. (20 - 18.6 cm). Added surgery (13.3%) were for implant fracture (1.8%), Weight Bearing Nails [WBN] or screws), bone grafting (3.8%), bone fracture (5.0%), callotomy (0.6%), other surgeries (2%). General anaesthesia (clicking) for early healing is currently 3%.

We designed the specific protocols to prepare the patients for surgery. The aim was to increase their muscle force and flexibility before surgery, recover early on the day of surgery, achieve full motion, and walk. We aimed to ensure that they could be discharged on the day of surgery and maintain full motion through the lengthening period, thanks to 5-8 h of daily training. Over time, we could increase the distraction speed by maintaining normal motion (44-50 mm in 1 month) and achieve faster consolidation. Of course, the training regime required compliance; not imposing rules on patients does not generate noncompliance. Not asking them to walk throughout the lengthening procedure does not induce noncompliance about walking but induces other complications (loss of muscle force and slow recovery that depend not on the patient but the technique used).

We observed many noncompliances, mainly for the physiotherapy program, the activities' recommendations, not the click maneuver itself, as all patients could achieve the aimed gain. No fracture or other complications occurred after bone fusion. We recommend that patients do only light sports (no contact or impact sports) until the surgeon certifies bone fusion.

In this period of 30 years, we had some complaints raised from cosmetic patients (none from discrepancy or dwarfism patients). Along with complications, they are potent stimulators to improve medical behavior. They forced us to understand the underlying reasons and the psychological environment. One administrative complaint was raised as a male patient presented his National Health Insurance (NHI) card at the hospital to pay through the NHI instead of self-paying, for which he was not eligible. The case was solved quickly, and he paid for the procedure. A 50-year-old male did complain about slower healing than other patients but dropped his complaint at the final healing. Four female patients complained after fracture, not complying with their expectations, and preventing them from having a fast recovery. Their main concerns were fractures, incomplete information, complications due to the surgeon, and minor sequelae. Fractures triggering complaints do not change the result. Patients with fractures who did not complain were satisfied with their treatment. For complaining patients, the treatment path and result were complete with the recovery of full motion and activities, and the complaints closed with no medical responsibility.

The underlying combined reasons we found were the occurrence of a fracture, unrealistic expectations versus natural recovery, psychological conditions at the time of surgery (divorce, not informing the husband, and hidden psychiatric disease with significant lies, for example). A major factor for increasing complaints is when the patient gets the complication treated by another surgeon, generally with little experience in cosmetic weight-bearing lengthening nails.

We found that problems occurred mainly due to noncompliance with fundamental features: No clicks = no gain; no training = No flexibility + added muscle loss; complete contact or impact sports before bone fusion = fracture; bad bone quality + noncompliance = fracture; no filling of the Internet Application, delayed arrival or no presentation at the gym = Risk of complications.

Some complications occurred due to deception, which includes dynamic behaviors such as lies, but also all the passive behaviors in nondisclosing essential elements to the doctor (e.g., not declaring using medication inhibiting ossification). For instance, two patients reportedly broke their nails' spontaneously without trauma.' However, their next of kin later informed us it occurred during skiing before bone fusion.

Unrealistic expectations are often observed as a direct or indirect consequence of the psychological projections that the patient has over the surgery and its outcomes. Quite a few patients expect the procedure to increase their height and to change their personality somehow, giving them the confidence, charm, and power they feel lacking.

One of our patients discussed his lack of self-esteem during the presurgery psychological appointment and said: "I know I have a psychological problem that can only be healed through surgery."

Another patient reported: "if I grow my height, I will no longer be the one to be dismissed in conversation. I will have more power."

Some patients project their need for empowerment onto others, so their internal judgment becomes external:. One patient said: "no one takes short people seriously; it is like you are always a child. I will be taller, so I will not be seen as a kid anymore."

These brief statements highlight the expectation residing in most patients to experience a body change and a psychological transformation.

Although it is, to an extent, reasonable to expect a boost of confidence when growing taller, primarily through a challenging process, the hope of a personality or status change comes very close to "magical thinking." It can compromise our patients' reality testing.

Often other stress factors in the life of patients cumulate to make lengthening hazardous when expectations are unrealistic. Association of divorce + loss of work + conflicts + lengthening induces a high psychological load and destabilizes patients.

We often observe patients who undertake the surgery within a very conflictive relational environment, where they feel the need to hide what they are doing from loved ones because they are scared of judgment and rejection. As a result, they often find themselves isolated, lacking support, and emotionally cut off from their world.

Most patients will not reveal the surgery and its outcomes to anyone in the family and their circle of friends and can take extreme measures to avoid being questioned about it. For instance, one patient stated: "if the surgery is successful, I will quit my job, move to another city and make different friends so that no one will ever suspect what I did."

The above statement is possibly the most extreme declaration of a coping strategy that most of our patients enact, relying heavily on deception and self-isolation.

Arguably, the need for deception is a core psychological factor in most patients undertaking the surgery for cosmetic reasons, thus highlighting the inherent risk of the surgeon being deceived by the patient in his attempt to protect their self-esteem and sense of identity.

Rejection, conversion, or projection toward the "Bad Father" is sometimes required to maintain the psychological (distorted) foundations of the patient who misjudged the procedure's heaviness and psychological burden.

Some elements can be highlighted through psychological tests and evaluations. For instance, MMPI-2 test results on cosmetic patients show an increase on Scale 6 (Paranoia Scale). Patients who want cosmetic surgery may fear judgment, mistrust, and lack confidence in others' understanding. This factor could potentially explain the need most patients have for deception and self-isolation and offer some prediction of potential challenges.

However, psychological evaluations did not prove efficient in detecting the decisional and compliance profiles, realistic expectations, and risk of deceptive behaviors.

#### How to get more compliance from patients.

Each difficulty should raise an aim for adjusting treatment. We worked at improving the medical treatment to make the process better accepted medically and psychologically. However, this did not suppress noncompliance, which could not be inferred from the preoperative evaluation.

Providing preoperative and postoperative training is required to explain physical and psychological implications to patients. A team of trainers is necessary for coaching patients to maintain a normal range of motion and positive psychological status.

We can calibrate patients' pain threshold using morphine spinal anesthesia by reiterating "no pain" postoperatively, by full walking, and by frequent reassurance. With morphine anesthesia, the medical team can initially maintain decisional authority.

Difficulties generally occur after 10–20 days when the healing inflammatory reaction takes over. Intensifying physiotherapy, accelerating the distraction rate, and anti-inflammatory drugs are necessary. Painkillers do not act on the mechanoreceptors and often placebo works better psychologically than standard painkillers on the "white balance" of emotions and pain calibration in the brain.

## The Fast-Reset Treatment for Decreasing Fears and Improving Compliance

When their fears are too high, we can provide psychological "shock treatment" with the Fast-Reset (Acronym of Focused Awareness Shift Technique Reprocessing Emotional Subjective Experience Traits).<sup>[5,6]</sup> It is a nonhypnotic technique aimed at "upgrading" emotional responses, releasing conditioned, subconscious and preconscious associations in the real time. It uses shifting the subject's attention in a specific sequence and the contemporary cognitive integration of emotions to disconnect them from some past medical history of trauma. It often erases some memories of previous trauma, which allows them to move forward with less pain.

Suppose the unknown brings noncompliance and nonadherence to treatments, mainly due to fears

and emotive resurgence of past adverse events, after approximately 4 weeks. In that case, patients generally become more compliant because they see the results of their work. In other words, the shock gets better controlled and the brain recognizes feedback from the body, which can be trained. At that time, the inner tensions of the patient are released, and the medical decisional authority can return. The rational brain (RB) is gradually adjusting better to the emotional brain (EB).

## Implications of the psychological status on results and complications

The psychological status is driving the results and potential complications. Complications are often considered pragmatic due to the external events (accidents), internal problems of the patient body (e.g., cardiac fragility and weak bone), or medical negligence. Other causes of complications are not taken into account (e.g., voluntarily nonusing crutches when partial weight-bearing is indicated: The accident is retained, but not the root cause). Measuring the actual weight of each element generating it is not part of our practice in a complication. Doctors' Lies are very well defined, even by Medical Councils, but deception (including lies) and noncompliance of patients<sup>[2,7-9]</sup> are often not taken into account in the root cause of complications for preventive and curative actions.

Limb lengthening is similar to daily life: Slight deviations may induce heavy accidents ("complications"). In the patient-doctor relationship, patients do not evaluate their behavior nor know the associated risks. Doctors know the risks, but their guidelines may not be followed, sometimes resulting in significant complications and complaints. The problem might be linked to communication, but a factor is forgotten, the Decisional Authority.

#### The Decisional Authority of Actors

Surgeons empower the role of the knowledgeable person. However, in our Internet world, patients do shopping to find the practice fitting their ideas. They often question the recommendations of competent and experienced surgeons when they are too demanding. The best option for their health is not always the one chosen. Patients should rely on the chosen doctors and follow their recommendations to secure the result, leaving the decisional authority in their hands.

In cosmetic surgery, patients decide for their bodies and life and thus for the treatment they wish. They master the decision but also the treatment, sometimes against doctors' guidelines. Low compliance sometimes results in complications.

#### Stanley milgram and the decisional authority

Stanley Milgram, an American social psychologist and associate Professor at Yale University,<sup>[10,11]</sup> was struck when Adolf Eichmann, who organized Holocaust, said he did it

because he obeyed his superior. The Decisional Authority was not his responsibility but external to him.

Milgram designed an experimental study with subjects (ordinary people) where he showed that they could harm other human beings when the decision (that he calls decisional authority) is external to them. Surprisingly, almost all subjects did not consider Human Ethics or the potential damage induced by their action.

In the Milgram experimentation, subjects obeyed the order because it did not impact their own body and baseline psychological comfort. Humans are isolated from Ethics and follow the External Decisional Authority when pain or trauma is applied to someone else.

#### Conformity, Compliance, and Obedience

Three basic behaviors can be observed socially:[12,13]

- Conformity: A change in behavior or attitudes brought about by a desire to follow the beliefs or standards of other people
- Compliance: A type of social influence where an individual is persuaded or urged to do what someone else wants them to do, following his or her request
- Obedience: A change of behavior in response to commands of others.

Patients may undertake cosmetic surgery to reach the "herd standard" (conformity), for example, the average height of their peers or the high standard of socially well-established people (facial surgery). They are generally not used to imposing tiring exercises and painful procedures on their body.<sup>[7]</sup> In standard cosmetic surgery, the body is modified, and the patient has to wait for complete healing.

In a cosmetic lengthening, the process is extremely demanding and provides a high level of stress for maintaining full motion, activity and tissues growth, similarly to the transformation of a 'caterpillar', into a 'butterfly', through the difficult 'chrysalis/pupa' transformation. The brain perceives it as "pain" when someone suffers psychologically and physically. This pain is not from the implant but the tissue-growing procedure and is observed at night disrupting sleep. In front of suffering, humans develop noncompliance.

Pain in cosmetic lengthening can also be a challenging experience for patients, as it, to an extent, contradicts the natural "mammal" experience: under normal circumstances, pain indicates a threat to survival and well-being and is therefore avoided, whereas in the lengthening process, pain is a dimension to explore and deal with, rather than something to shy away from.

#### **Orthopedic Versus Lengthening Surgery**

In a necessary surgery (fractures, joint replacement, or one with lethal risks), patients accept the decisional authority of the Doctor. However, they do not always follow compliance guidelines, increasing the complication rate.<sup>[14]</sup>

A nonnecessary cosmetic lengthening is asked by the patient for psychological reasons, not for handicaps, thus by the EB. The lengthening process acts as an "Initiatic Path," which through intense body suffering, allows the patient to reach a higher level of understanding of his human condition along with a resulting psychological and behavioral maturation. For that process to occur, they go through bodily suffering that they will forget later.

Five years are required for a 6 cm natural adolescent femoral growth, but only 6–8 weeks with a lengthening surgery (30–40 times faster). This fast surgical process generates changes in the body. Limbs sensors fire into the brain, creating a sort of local "firework." In the brain, hormonal production increases.

Body and psychological shocks occur after intense body events. In sports professionals, training prevents them. Lengthening patients cannot be fully aware of or prepared for them, even after thorough information. Patients go to sleep and awake without complete control of their lower limbs. Gradually, the lengthening and healing processes decrease the physical capacities and induce the weakening of the body (loss of muscles). The surgeon asks them to do exercises, thus acting against their body and generating pain. The surgeon might then become the "Bad Father," creating pain in the body.

It can also be observed that patients coming to the surgery with high and, at times, unrealistic expectations over physical and psychological growth might then experience a sense of frustration when confronted with the reality of the process. Projecting this frustration onto the doctor's authoritative figure is a viable (although potentially harmful) coping strategy. In contrast, the surgeon possesses the key to change but sternly prevents patients from reaching their goals, similar to what was observed by Klein. [15]

At that stage, the patient takes over the Decisional Authority.

## The brain decisional pattern in case of the traumatic event

The primitive emotional functions of the brain, mainly the prerogative of the limbic system and the effector systems-governed by the autonomic nervous system-come into play much faster than the cognitive components. In case of emergency (e.g., predator), the fast-switching "EB" supersedes the "RB," (evolved) which has not have the capacity to deliberate fast, objectively, or wisely, even if there are some attempts of rationalization from the RB.

EB maintains learned reaction patterns, i.e., conditioned by past experiences (particularly shocking events), which sometimes interfere with the person's conscious will and well-being. This phenomenon is easily observed in patients who fail to comply with the routine procedures for recovering function despite their apparent willingness to undergo surgery.

The "Trauma" (surgical event) brings the patient out of his comfort zone, [5,6,16] raising a "Biological Alarm Response" of the EB [Table 1]: Patients go into a Shock/ Freezing. The decisional authority is taken care of by the patient (EB).

The EB is also controlling the initial decision for cosmetic surgery. Patients want to improve their survival conditions by modifying their bodies. The chameleon needs to transform his body to survive better. Decision-making in cosmetic surgery is difficult and raises internal conflicts which need to be understood by healthcare professionals.<sup>[17-21]</sup>

#### **Reaction modalities**

The EB activates muscle tone (MT), inducing three types of actions, two with MT activation ("Fight" with full motor activation, and "Flight" with escape), and one with MT inhibition stopping the procedure ("Fright/Faint") [Table 1].

In a "Fright" reaction, patients may freeze and stop moving their limbs, raising risks of swelling, pain, muscle atrophy, or clotting. The patient acts against himself and does harm to himself.

Most patients go to the mixed compliance pathway and achieve success and Maturation. Some, with too many other psychological problems independent of the lengthening, are noncompliant because the surgery is not at the right time for them. Internal conflicts prevent coping with the procedure; they are prone to complications, like stiffness or a fall with fracture, and ultimately to complaints. If they resolve complications, they will experience the benefit of their new stature. However, they will not recognize their care quality and will hunt the "Bad Father" instead of resolving their internal conflicts.

Some patients, against medical guidelines, fly away and go home even a few days after surgery. There are two profiles. Some go on at home and finalize the lengthening controlling it themselves, without medical control. They were alone in their process, isolated, and not significantly mature. Some, faced with the heaviness of the procedure, decide to stop it, keeping the surgeon confident. They recover fast and "turn the page," but may feel the process fails in their human capacities to achieve dreams. They need positive reinforcement from the team, family, and friends, bringing them to a higher level of Maturation.

#### **Deception and Psychological Problems**

All patients enact some level of deception. Uncontrollable patients at risk of significant complications and complaints mainly represent two groups of patients with psychological problems.

The first group is patients with psychiatric disorders not revealed to the caring team. As cosmetic lengthening

Trauma (Stressful Event) Surgery RB in Harmony Comfort Zone With EB **Biological Alarm** Response 100% EB **Emotions** Shock - Freezing (Dismay, Inhibition) Fight - ↑ Muscle Tone Flight / Escape - ↑ Muscle Tone Fright / Faint - ↓ Muscle Tone 100% EB EB + RB 100% EB 100% EB Stops / Withdrawal Compliance Non-Compliance Goes on by their own Failure Difficult Success Fight for Not recognised Non Ready To Fight Themselves No significant Maturation maturation (EB + RB) Presence or Complication Not of Transform into a Success Complication No Complication Projection of Problems Difficult Path, High on 'Bad Father' Exposure to Risks (Surgeon) Creating the Effect of Positive Damage/Pain Reinforcement by Team & Environment (Family, Friends, etc.) BE + Integration in BR Success Complaints Long Term Success Success Incomplete Maturation Maturation (EB + RB) if No sequels EB + RB Filed EB + RB Not adjusted No recognition of Care Not satisfied about Father No Maturation vs 'Initiatic Path' (External Authority)

Table 1: Decisional authority of patients with levels of brain involved and actions

EB: Emotional brain, RB: Rational brain

is requested only for psychological reasons, refraining from disclosing such information will not allow for providing the proper psychological care. It will result in a failure with physical complications, nonresolution of the patient's problems, and dissatisfaction. Such patients are contraindications to lengthening.

The second group is patients with psychological problems who are trying to do the lengthening for escaping from life problems (dismissal from work, divorce, death of their partner, of parents, sometimes cumulating few of them), 'focusing on themselves' to restore their self-confidence. A lengthening procedure at that stage is not indicated for a high risks of non-compliance.

#### Postoperative Events and Noncompliance

Recovery is directly dependent on the vascular supply and tissue remodeling. The more patients remain active, the faster they recover.

Compliance and success are higher in aim-driven patients, sports professionals, patients approaching lengthening in a relaxed and unstressed way, and patients suffering a lot (very short statures or deformities). Compliant patients sometimes have impressive recovery.

Noncompliance reflects internal conflicts. The EB activates various alarms with dysregulation of control systems. The pain threshold may lower, and patients may self-medicate with unrevealed morphine-derived painkillers or high doses of nonsteroidal anti-inflammatory drugs, which may retard or inhibit bone healing. Often, they do not go to the Gym or do exercises. It fast brings stiffening of soft tissue, pain, improper walking with the abduction of limbs, slow healing, and loss of autonomy. Rarely, patients do not use stockings, raise limbs, or take anticoagulants during the entire lengthening period, thus exposing themselves to deep-vein thrombosis, pulmonary embolism, and even death.

Patients do not blame themselves but the surgeon: they are projecting a transfer of responsibility for the pain and complications.

#### **The Actors in Complications**

In any complications, three factors are mainly involved: the technique, the patient, and the surgeon. The technique is essential as surgeons depend on general statistics of current techniques, different from one century ago, and from the ones in one century. External fixators induce stiffness and infection, while nails may break. Patients and surgeons depend on mutually agreed techniques, which have their limitations.

Surgeons may have responsibilities for treating complications. They should not be responsible for the limits of techniques nor a complication resulting from noncompliance of a patient. Understanding the root causes of complications allows for improving care for patients. It prevents exaggerated surgeons' responsibilities for some complications, resulting in protective surgical behaviors that are sometimes unsuitable for improving the overall quality of care.

By taking over his treatment decisions and conduct, the patient may induce substantial implications, with physical

and psychological complications (boomerang effect). Patients increase risks with noncompliance or with some nonappropriate psychological parameters like past traumas or lies

The responsibility for the result and complications should be weighted not only for the surgeon but also for the patient to have a clear picture of the root cause of complications for better solving and preventing them. Even when we inform patients, share decision-making with them in a multidisciplinary team, and establish clear boundaries and responsibilities, the EB takes over all rational decisions and changes the rules and standard relation between patients and doctors. Long preoperative psychotherapies are rejected by patients who want to correct their "physical" short stature. Preoperative psychological consultations failed to find who would not comply or lie. One support treatment we can apply after surgery, in the body transformation phase, is to change the vision (brain programming) patients have in their postoperative body reactions. Placebo, specific psychological support, including team support with daily training and coaching, and other techniques like the Fast-Reset, proved efficient for that purpose.

#### **How to Detect and Treat Potential Problems?**

Preoperative detection of potential problems is complex and psychological tests, and consultations are ineffective at predicting compliant patients or deception. However, we can outline a few small elements to study, which are often found when problems present.

Discipline capacity is essential, and professional sports people are used, to some extent, to suffer to get the result and behave well. Culturally, there are also differences. Compliance is a positive attitude in most of our Japanese patients.

Potential signs for positive attitudes are numerous (Tolerance and acceptance of stress and suffering, organizational capacity, adaptation to problems, and clear and relatively low expectations).

Simultaneously stresses overload the emotional capacity of patients and result in complications (Divorce, loss of job, death, professional or affective failure, and conflicts, to name a few). The most rational patients are not always the ones who succeed the best. The worst condition at risk of problems is hidden past-medical or psychiatric history. Sometimes the Patient, to get accepted for surgery, hide what would constitute a contra-indication, even if this process is part conscious and part unconscious.

Very high levels of mistrust, as certified by high scores on MMPI-2 Scale 6, are also predictors of potential deception from the Patient.

The need for hiding and isolating from others can also predict a patient who will struggle with compliance and openness. There is no recipe for knowing who will behave well, and the treatment is based on 360° support with an entire team, medical but also psychological. When nonunderstanding events occurs in the patients, explanations, reinsurance, treatment, and cocooning are essential. When the Patient is in shock (even if he does not show it), additional treatments with brain-behavior reprogramming are helpful.

#### The Improvement of Self-Image and Self-Esteem

Psychological final evaluation lies out of the scope of our article, which provides only an insight into the mechanisms of noncompliance in the complicated lengthening procedure. The final psychological outcome is positive, with a great improvement in body image and self-esteem, even after problems and with an overall high rate of complications. [22-34]

#### **Conclusion**

During a cosmetic lengthening in the Doctor-Patient relationship, the Patient takes over the Medical Authority without the right competence.

Patients who go through the "Initiatic Path" of lengthening can grow physically and mentally. They get substantial benefits from it, mainly in their self-confidence and self-esteem. Patients not psychologically adjusted for this type of surgery are noncompliant and present more difficulties and complications. Patient evaluation includes the need for continuous physical and psychological coaching and psychological "trauma" treatments.

It raises the question of the precise role of the patient's behavior in induced complications, which is currently not outlined in the medical literature.

The responsibilities of the patient and the surgeon should be separated and studied better, as each has limits but interact at various levels to generate complications and result.

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#### **Conflicts of interest**

There are no conflicts of interest.

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