PSYCHOSOCIAL ASPECTS ASSOCIATED WITH PERIPHERAL FACIAL PARALYSIS IN SEQUELAE STAGE:
CLINICAL CASE STUDY

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ABSTRACT

The background of this study is to describe and analyze the speech therapy intervention of a patient in sequelae stage of peripheral facial paralysis, with emphasis on psychosocial factors involved in the therapeutic process. It’s a clinical case study, female subject, 52, in the sequelae stage of peripherical facial paralysis, assisted from March to July 2010. The clinical material was systematically recorded in writing and facial expressions were photographed regularly during the therapeutic process. The data were analyzed in a biopsychossocial aspects. The clinical of peripheral facial paralysis occurred 18 years ago in hemiface left with unknown etiology. During the period that began speech therapy, the subject had significant muscle contractures and synkinesis that made up the sequelae. It can be discuss that even after almost 20 years after the onset of peripheral facial paralysis, the patient reported in detail the psychological distress and social limitations imposed sequels that your routine. Complained: inability to express their emotions in the face communication situations. Listening therapy of psychological contents led to patient deal with these conflicts and, as such, seeks alternatives both functional and subjective to express herself in terms verbal and nonverbal safer and less anxiety. The therapeutic approach, which valued subjective aspects in the effectiveness of the method in the case studied speech. The theoretical basis provided subsidies for basic to intermediate technical interventions.

KEYWORDS: Facial Paralysis; Case Study; Psychosocial Impact

INTRODUCTION

The face is an essential element in the subject's psychic and social functioning since facial traces and expressions mediate social interactions and affect the constitution of subjectivity1-3.

In this perspective, there are psychic and social impacts caused by peripheral facial paralysis (PFP), a clinical condition that may drastically inhibit facial expression. And mimic, thus limiting subjects’ possibility to evidence their feelings. Therefore, it may be said that this condition generates communication disorders4-10.

Organically, PFP comes from the interruption in axonal transport to the VII cranial nerve, resulting in complete or partial paralysis of facial mimic. The facial nerve is frequently the most affected nerve in the human body, as it runs through a 35mm bone pathway and is therefore subject to the action of compressive and infectious processes of several
natures that may interrupt its nervous influx, leading to complete blockage of its functions\textsuperscript{11,12}.

The etiology of PFP includes several causes, among which are: inflammatory affections, tumors, metabolic disorders, herpes zoster, and, most frequently, idiopathic or Bell's paralysis, representing an average of two thirds of the cases\textsuperscript{13-16}.

The sequelae of PFP may be found when there is partial neural regeneration, causing a post-paralytic hemi facial spasm and/or persistence of the motor deficit with muscle contractures. Synkinesis are also part of these possible sequelae and cause discomfort, as they distort facial movements and expressions, in addition to promoting contractions and compromising facial symmetry during rest. Another characteristic of the sequelae may be permanent hypofunction of the affected facial muscles, typical of the flaccid phase of PFP\textsuperscript{14}.

In rehabilitation of cases with PFP, the speech therapist traditionally develops a myofunctional rehabilitation program, from the investigation of the damages caused to the muscles by the lesion in the facial nerve. In this approach, the professional assesses the functions related to these muscles and intervenes aiming to restore both functional and aesthetic aspects. However, it is desirable not to overlook the psychic and social aspects associated to this clinical condition\textsuperscript{3,17}.

Thus, in addition to considering the peculiarities of the cases with PFP – selecting adequate approaches and strategies and paying attention to each patient’s health conditions and nervous potential\textsuperscript{3} – it must also be considered that rehabilitating facial movements is a fundamental condition for this subject to recover both socially and psychically\textsuperscript{4,6,8,10}.

Considering that the body is symbolically marked by subjective registers, it should be emphasized that when any region of the body is hurt, the individual’s psychism is also affected. Therefore, in order to understand these patients' suffering, the reminiscences relative to their past lives and future expectations help in understanding the pathological process and contribute to a more effective treatment of organic manifestations\textsuperscript{18}.

It should be noted that social relationships – pivotal to the subject’s physical and affectionate survival – generate conflicting feelings for, at the same time that they provide cooperation, protection, satisfaction and love; they may also constitute themselves as a threat or a burden, imposing demands and limiting personal freedom\textsuperscript{19}.

These considerations are timely in order to introduce the notion of stigma, referred to as an identity deteriorated by social action, and associated to individuals with physical, psychic or character deformations, or any other characteristic that makes them different amidst social interaction\textsuperscript{10}.

It is observed that in people with PFP, there is an association between this clinical condition and the significant impacts in social activities, public behavior, professional performance and in inter-personal communication\textsuperscript{4,5}.

In this perspective, it should be noted that the non-compliance with normality patterns of aesthetics favors social rejection. In this circumstances, the subject suffers twice: for not having an expression that is socially appreciated, and, moreover, for attributing an extremely painful character to his or her limitations, which makes his or her identity more frail\textsuperscript{4,10,19}.

Therefore, the aim of this study is to describe and analyze the speech therapeutic process of a female patient in the sequelae stage of PFP, considering the implied psychic and social effects.

\section*{CASE PRESENTATION}

This study was approved by the institution’s Research Ethics committee (nº 251/09).

The patient, aged 52 at the time of speech therapeutic assistant, had a PFP of unknown etiology on her left hemiface, 18 years ago, and was, therefore, in the sequelae stage. She reported that days after having been struck by the PFP, she sought physiotherapy and spiritual help, as described in the following session of this study.

The speech therapy sessions occurred during the period in between March and July 2010, and the process was introduced by an assessment of the face’s functional conditions, followed by myofunctional therapy and listening/interpretation of the psychic and social contents involved in her specific case\textsuperscript{20}.

The clinical material was registered systematically, through reports and photographs of facial expressions, and analyzed using reference theories from Psychoanalysis, Social Psychology and Speech-Language Therapy, in the perspective of the articulation among Language, body and psyche.

According to the ethical norms for researches involving human beings, the patient agreed to participate in the study by signing a Free Consent Term.

The patient’s identity was preserved, and her name was replaced by a fictitious one (Teresa).

\section*{Case History}

Teresa became acquainted with Speech Therapy through her participation (by an interview) in a scientific study that aimed to describe and analyze the psychic and social contents involved in PFP.
In this interview Teresa reported the difficulties she faced in her professional life (she is a hairdresser), emphasizing that her clients’ frequent questions about her face’s appearance disturbed her profoundly. However, she stated that, in spite of the problem, she “thanked God” for being in good health and be able to support and provide for her family with her work.

After the interview, where she sought information about the nature of speech therapeutic interventions, she manifested the wish to begin therapy sessions.

The results from the face’s functional condition assessment indicated that the PFP occurred on the left hemiface, with moderate sequelae, important left eye and mouth synkinesia, considerable face asymmetry, inhibitions of movements and expression lines on the left side, except the nasogenian sulcus, that was accentuated to the left.

After the assessment, Teresa reported that right after the installation of the PFP, she was very saddened, and decided to stay home, putting her professional activities on hold for about one month. She avoided contact with neighbors and family members, and went out only to go to church or to the doctor.

She feared people’s reactions, especially her husband’s, because she believed that her appearance could lead him to leave her. However, on the contrary, he became more loving and understanding. This data is significant, since family support is (and was to Teresa) an essential element for the subject to be able to cope with the mark of his or her stigma. Her partner’s support was essential in the reestablishment of her social relationships; as the patient reported, which is compatible with other reports found in literature.

As the etiology of her condition was undefined, Teresa suspected that the PFP was derived from a strong tooth ache followed by earache; that had occurred a few days earlier.

This information should not be overlooked in this case, considering that the facial nerve has a long bone pathway and, therefore, is subject to several different compressive and infectious processes, that may interrupt the nervous influx.

She then proceeded to describe the day before the PFP. She had been at the club, went into the pool with her children and, while getting out in order to eat a snack, she realized that she “was saying the word ‘bread’ in a funny way”. Upon returning home, she continued to find (more and more) that there was something strange with her own speech. She went to bed and, upon waking up, at around 3 in the morning, realized she ‘was crooked’; and said: then I must have twisted while sleeping”. She added that before the PFP she had been overloaded with work, and therefore very tired.

She then said that, after the PFP, the feeling of not knowing what other thought of her appearance are also in accordance to literature reports about the refusal towards social interaction. She cried a lot during this period, but never in front of anyone. She suffered with the state her face was in, but considered that what had happened “was not too serious”, thus revealing conflicting feelings: she was suffering, but felt guilty for feeling so.

Some people, noticing her absence, started to look for her at home and “found out” what had happened. Teresa hated this situation because she had to speak about the problem. When she did, she minimized the issue, so that others would not be “too scared or worried. Even so, she could not avoid these reactions, and was very aggravated by them, thinking that, after all, she “wasn’t dying”. She said that even after almost 20 years having past, she avoided the subject.

Around one month after the occurrence of the PFP, Teresa decided to return to work and “face the public”, which “was not easy”.

She then began participating in spiritual rituals motivated by a friend, and felt a “great relief in the soul”. However, she abandoned the religion shortly after, since she did not see improvements in her physical state.

Thus, she decided to dedicate herself entirely to the medical treatment, financially putting in “more than she could” in search for specialists. She consulted with a Neurologist, who prescribed a treatment with anti-inflammatory medication as well as physiotherapy with electro stimulation.

She reported that the treatment was “very painful”, especially the physiotherapy sessions with electro stimulation, that lasted 3 months. She was then asked to undergo a CT scan, which left her very apprehensive. She received the news that the exam had errors and should be repeated. Upon learning this, she decided not to undergo another exam, in spite of following the medical treatment.

With specific regards to speech, the articulation distortions made her avoid speaking to other people, including her children, since, in order to make herself be understood she had to repeat herself several times, which evidenced even more the asymmetry in her face. The restrictions related to the difficulties in speech production became smaller with time, but she still felt that her speech did not follow the spontaneity she had before the peripheral facial paralysis, still causing discomfort in the production of bilabial and labiodental phonemes.

As far as feeding, she says that at first the “food escaped” (through the lip commissure), and so she
refrained from eating in front of other people. When this was inevitable, she was extremely careful when eating to avoid the problem. She overcame this difficulty, and only complained of tearing up in her left eye during feeding. She says that when people notice this she says “I am emotional, laughs and changes the subject”.

When she takes pictures, she opts to “stay serious”, but tries to “smile with the eyes” as she doesn’t like her smile. She does this in order not to “mess up other people’s pictures”. But, she added that after her daughter taught her to slightly turn her face to the ride side so the smile isn’t “too crooked”, she smiles in the pictures taken by her daughter.

She believes that the health professionals with whom she had contact, the neurologist and physiotherapist, did not have enough knowledge about PFP, and that “this subject is like a taboo in society” and suggested that if information about the implicit problems could be widely spread “people would know what to do to get treatment”.

Another fact she reported was the occurrence of symptoms similar to those of PFP in 2007, when she had a “terrible, horrible feeling”: she started to see light flashes and to feel a headache. She immediately went to the doctor, fearing that a PFP would occur again. The doctor told her she “was weak” and prescribed a B-Vitamin complex. Teresa is still careful when scratching her eye, executing the movements “lovingly, because if I scratch too much it might turn”, and that the “fear of PFP returning” still haunts her because she is afraid of “being crooked again”.

At the end of the interview, it was clear that the listening offered to Teresa had brought her relief, possibly for having had the opportunity to speak about things that had been so far repressed psychically and, many times, masked in her social interactions.

Therapy Process

Myofunctional rehabilitation was conducted with the following: manipulations in facial muscles (in the direction of muscle fibers) associated to isotonic myofunctional exercises to stimulate the reinnervated muscle segments, and relaxation techniques and stretching in order to dissociate movements of contracture and synkinesis, enablers in the process of rehabilitation and minimizing sequelae.\(^\text{3,21}\)

Also indirectly the bilabial and labiodental phonemic distortions were approached, because when she produced the plosive phonemes /p/, /b/ and /m/ there was a slight deviation to the opposite side (right) and in the fricative sounds /f/ and /v/ there was a certain weakness during the production in this articulation point that still bothered her. The proposition was that in performing the exercises mentioned above, this bother could be minimized.

Teresa felt uncomfortable in front of the mirror, especially when smiling and noticing her left eye closing and her forehead lifting. She mentioned that it had been a long time since she had last looked at herself on the mirror.

As the sessions progressed, she began to deliver personal accounts, in between exercises. Once, she brought family pictures to show to the therapist, always discriminating the ones that had been taken before and after the PFP: “before I used to smile, then I gave up smiling”.

In this context, the following fragments are highlighted: she regretted having remained serious in her last picture beside her father, before his passing a short time afterwards; adding that she was happy, but in front of the camera she changed her expression and “didn’t convey her real feelings”. Another photograph that stood out was one of a wedding, and she mentioned that she had “begun practicing to smile in the pictures of her daughter’s future wedding”.

Another picture: one that her son had taken while she was distracted, laughing out loud at a “party”. It was observed that the facial asymmetry was almost unnoticeable, and that there she seemed to be really showing her feelings. Teresa agreed, showing satisfaction.

In the beginning of the therapy process, the facial muscle tension was significant, which gave her a serious expression, and therefore she always appeared angry. However, with the exercises, her expression became softer and the muscle tone increased gradually (especially in her orbicular muscle). In the rehabilitation of oral functions, muscle tone maintenance and the optimization of the residual muscle contraction capability were crucial, associated to the minimization of the impact generated by facial asymmetry during rest and during movement.\(^\text{3,21}\)

Teresa no longer felt the tremors, especially those that occurred in the eye region. The exercises became more directed to her greatest wish: smiling.

Teresa would be ironic, saying that “a weight of half a ton” made it impossible for her to show her lower teeth when smiling. Many times, she touched the lip region rather aggressively, saying: “see? It doesn’t come down!”.

Once, during one of these episodes, it was shown to her that, on the contrary, in order for this region to be softened, it was also necessary to touch it softly.\(^\text{21}\) She answered that her anxiety and lack of patience did not allow her to execute these soft facial movements. She was then encouraged to
results

Thus, the exercises associated to interventions of this nature – the ones that mobilized Teresa’s subjectivity – favored the gain of effective results: less tension in the muscle lowering her lower lip, and significant improvement of the symmetry in relation to the non-affected side of her face.

The improvement in her condition continued and, more and more, Teresa spoke about significant events throughout her life history. After three months of therapy sessions, she said that her brother (a drug addict) had had a “sad death”, because he had been murdered. And pointed out that: “his face didn’t deny the history (of his addiction), as much as he tried to hide it”.

The therapist then intervened, asking Teresa about her own face’s history. Her answer: “a face that has suffered too much with PFP, but that is learning to deal with it”.

Gradually, always alternating personal accounts and dedication in doing her exercises, Teresa showed significant improvement in the orbicular muscle of her left eye, absence of tremors in the region and relative improvement in the mobility of the oral region (to the left) considering the conditions found at the beginning of the myofunctional rehabilitation.

Teresa recognized this improvement, that was accompanied by the interesting decision to go on a diet to lose weight, since she was motivated to take care of herself as a whole, and not only of her face.

On her last session, she gave the therapist two pictures, as a gift: one taken at the beginning and one at the end of the treatment, where, comparatively, the improvement of her facial condition was evident.

In conclusion, it should be stated that accepting Teresa’s subjective contents contributed to the effectiveness of the treatment of her organic manifestations.

### RESULTS

As was previously mentioned in this account, the patient had synkineses and significant muscle contractures as sequelae. She had difficulties in producing both bilabial and labiodental phonemes. Alongside her PFP condition she reported, in detail, her psychic suffering and the restraints that the mimic and expressive movements imposed to her daily life.

She complained: 1. of the impossibility to manifest her emotions through her face in communication situations, a condition that was worsened by the reduction in vocal intensity. 2. Of the fear in bothering/causing strange feelings in her interlocutors because of the synkineses, which generates psychic tension and, in a certain way, led her to avoid interaction situations.

As the patient spoke about her anguishes, her dedication in executing the myofunctional exercises increased. The patient had significant improvement in the orbicular muscle of her left eye, absence of tremors in this region and relative improvement in the muscles and mobility of the oral region (to the left). She also reported a “light” feeling in her face, considering the conditions found in the beginning of the myofunctional rehabilitation and, consequently, an improvement in the articulation of the bilabial and labiodental phonemes.

The softening of the motor function was possible when the patient found a place where she was free to speak about subjects regarding the peripheral facial paralysis that still haunted her. This fact significantly contributed to managing and execution of the myofunctional exercises.

### DISCUSSION

Once again, the myofunctional rehabilitation was important to the progress of the case presented above, but listening therapeutically to its peculiarities was pivotal for a parallel recovery of the psychosocial aspects that were implied. Moreover, it is worth noticing that the body is marked by symbolic records, thus making it necessary to investigate what leads the subject to psychic suffering, listening to the accounts and accepting his history.

It is also necessary to investigate whether the social relationships were changed after the onset of PFP. In the case presented in this study, it was seen that Teresa reported actions of protection and care from those close to her, which could cause confrontation, but also a certain discomfort in finding herself in the center of attentions. Furthermore, she worried about the image she conveyed to people who didn’t know her, possible strange feelings or an erroneous interpretation of her feelings from her facial expressions caused discomfort.

Teresa did not exactly fear social rejection, but the attribution of suffering faced with the condition that her own face caused her and this made her identity more frail.

The therapeutic listening of these contents stimulated the patient to deal with these conflicts and, thus, to find subjective, in addition to functional alternatives to express herself, verbally and non-verbally, feeling safer and less anguished. The acceptance of the subjective contents had a decisive role in the effectiveness of the treatment of the organic manifestations.
CONCLUSION

The Speech Therapeutic approach of this case permitted access to psychic and social contents implicit in the PFP condition, which favored the positive progress of the case.

It is suggested that studies on this subject continue to be conducted with more subjects, and focus on the clinical implications of a bio-psychosocial approach of PFP, so that these aspects may be incorporated by Speech Therapy practices in assessment tools and intervention conducts that contemplate them in a standard manner.

REFERENCES


