Facial transplantation: literature considerations

Transplante facial: considerações da literatura

Carla Patrícia Hernandez Alves Ribeiro César
Sonia Coelho de Oliveira

The book “Transplantação da face humana: efeitos neurofisiológicos na exibição e no reconhecimento das emoções básicas: estudo de caso com Carmem Tarleton” ("Transplantation of the human face: neurophysiological effects on the display and recognition of basic emotions: a case study with Carmem Tarleton") is the result of the doctorate of the Portuguese psychologist Daniela Alves, under the guidance of PhD, MD Armindo Freitas-Magalhães. It inserts the reader into a reality not yet studied in Brazil and, therefore, interesting to present to the Brazilian researcher.

According to the author, the impacts of facial transplantation have resulted in clinical, aesthetic, functional, social and emotional benefits, although the procedure is still experimental and some patients have experienced rejection, immunosuppressive complications and death.

The procedure has been performed in cases with a large facial deformity and, despite the aforementioned positive results, there are literature reports of transplant difficulties in the execution of emotional facial expression due to neuromusculo-skeletal facial lesions, affecting, consequently, the recognition of facial expressions evoked by patients and thus, the communication.

Facial transplantation is generally accepted by patients, since they aim to have a less disfigured face, but according to the author, there are difficulties in reconstituting their new identity, since the face of another person was transplanted on their bone structure, as well as the acceptance of this new face by their social network (family and friends), revealing a series of complexities generated from the procedure.

It also emphasizes that the evaluation, the surgical procedure and the postoperative are accompanied by an experienced multidisciplinary team composed of doctors, nurses, psychiatrists, psychologists and others. Although the author does not mention the speech therapist, it is inferred that this professional is also essential in the multi-professional team, in all phases of this intervention.

The first chapter of the book deals with the subject of facial disfigurement, defining it, revealing its possible causes, difficulties experienced by the patients,
their impact on self-concept, social interaction and other aspects.

The second chapter explores the topic of facial transplantation, revealing its historical aspects, types of transplants, anatomical and physiological neuropsychology aspects, identification of the face before and after the transplant, and the psychosocial approach. It shows that this is a recent procedure in the world, with only 28 transplants performed worldwide, being that until 2015, more specifically in France (nine cases) in the United States (seven), in Turkey (five), in Spain (three), in Poland (two), and in China and Belgium (one in each country).

Facial expression of emotion is discussed in the third chapter, from its theoretical aspects to the neuroanatomophysiological processes involved in basic emotions: joy, sadness, surprise, aversion, anger, contempt, fear and the application of the Facial Acting Coding System (FACS) for the analysis of emotional facial expression.

In the following chapter, the author describes the methodological process of her research based on the study of cases of patients submitted to facial transplantation and professionals, through interviews directed to the patient and to four professionals who performed or participated in the transplant team, in addition to photographic and video analysis of the transplanted American patient. The author presents several photographs of the patient from the pre-incident traumatic event, traumatic post-incident (chemical burns over 80 per cent of her body and face caused by her ex-husband), as well as compares the basic emotions in these three moments.

In the concluding chapter, she discusses the importance of understanding the neuropsychophysiological process in the presentation and recognition of basic emotions after facial transplantation, showing the expressive facial limitations in the transplanted patient, leading to communicative limitations, but contributing to self-esteem, quality of life and the (re)construction of her identity.

The book gives scientific contribution on the subject and allows reflection on the importance of emotional facial expression in everyday life.