Facial Palsy and Contemporary Reanimation Surgery: A Short Review

Hashem Shemshadi (M.D., F.A.C.S)
Professor of Plastic and Reconstructive Surgery, University of Social Welfare and Rehabilitation Sciences, Department of Clinical Sciences/Rofeideh Rehabilitation Hospital, Tehran, 19857-13834 Iran

* Corresponding author email: shemshadi@gmail.com

Received: 26 May 2020 / Revised: 04 June 2020 / Accepted: 23 June 2020 / Published: 27 June 2020

ABSTRACT

The primary purpose of this mini-review article is to introduce modern issues of reanimation surgeries in patients with facial palsies. Modern methods of reanimation surgeries are discussed for mentioning patients’ benefits, and their more satisfactions and hopeful horizons for the future of such cases with facial palsies. Facial paralysis, associated to implementing new reanimation surgery techniques, is presenting new advanced methods of facial nerve palsy reforms, through reanimation surgeries. Facial palsy, which occur by a diversity of reasons, need to be evaluated for their etiologies and prepare a proper surgical plan for their reconstructions. Stroke, trauma, congenital, neoplasia, neurological, immunological, viral infections, and psychological reasons, are some potential causes of patients with facial palsies. Brief reviews were done, based on recent evidences’ results in reanimation surgery practices. Due to any of above cited reasons, patients with facial palsies get physically and mentally disturbed and are willing to search ways, for solving their facial distressing problems. Consequently, mentioned patients are eagerly searching means to receive new available promotions to improve their facial palsies. In concluding, patients who undergo reanimation surgeries, if good results of their operations obtained, they will be motivated in gaining self-confidence, self-care, self-respect and therefore getting a cumulative their effective social bond, and raising their quality of life, after reanimation operations.

Keywords: sophisticated, operation, rehabilitation

1 Introduction

Pathogenesis of facial palsies are different based on their variety of etiologies. In the past, no matter what was the cause of facial palsies, patients’ satisfactions after reanimation surgical reconstructions, were insignificant [1], [2]. Currently, by assessing the face and facial palsies and their appropriate surgical designs for new surgical techniques, more satisfactions are regained, after reanimation surgeries [3], [4], [5]. At the present time, more surgical methods are invented for facial palsies and gradually, possibilities of gaining better results in future are promising. Facial palsies may be due different causes of genetic, traumatic and neoplastic and iatrogenic episodes. Better results have been gained by different facial dimension analysis and more precise surgical plans, based on the cause, extend of damages in each patient with facial palsy[6], [7]. Congenital facial palsies which are detected after neonates’ birth, are discovered in delivery rooms during newborn health-checks [8]. This latter mentioned cause of neonatal facial palsy, is difficult to handle and have inadequate responses to reanimation surgeries. Also, congenital causes of facial palsies, show a less degree of recovery in long-term periods. In some cases, facial nerve may be completely absent after birth [9]. Head and neck traumas, are another common cause for facial paralysis. Facial zones instabilities due to trauma, cause soft and hard tissues get traumatized and patients find to have
facial nerve damage. Trauma to facial zygomatic-
maxillary sites, also may cause facial paralysis, [10]. Stroke is another cause of facial paralysis. 
Stroke at any type, not only result patients’ face 
and facial nerve, also result their extremities’ 
palsy as well. Brainstem stroke, results ipsilateral 
facial nerve palsy and contralateral limb 
hemiparesis due to vertebra-basilar 
neuroanatomical impairment [11]. Surgical 
trauma following cochlear implants, result facial 
palsy, immediately and/or long-time post 
operatively [12]. Middle ear surgeries may be 
attributed to the reactivation of patients’ 
previously viral infections, and may cause facial 
palsy [13]. This mentioned facial palsy, has been 
reported to be recovered, spontaneously. Viral 
infections may also directly affect patients’ facial 
nerve and thus lead to facial palsy. Viral cause in 
Bell’s palsy, if be treated promptly, higher 
number of patients will have their facial palsies, 
get dissolved freely [14]. Suggestions of bilateral 
facial palsy with the level of socioeconomic 
status, personal habits, mental status and poor 
hygiene have been considered [15]. Not all facial 
palsies respond to reanimation surgery, unless are 
highly chosen based on surgeons’ decision for 
possible better results. Most of the above cited 
facial palsies, get recover and or end-up with a 
trivial palsy remaining. Tumors involving head 
and neck, may need patients to undergo extended 
operations. Post-surgical remainders, may leave 
facial palsies, and definitely need facial 
rehabilitation through reanimation surgeries, in 
order to minimize facial palsies into a better 
score. End-to-side facial nerve repair has been a 
promise in facial reanimation surgery [16]. Free 
gracilis muscle graft with cross facial nerve graft 
techniques, have been an advantage in selected 
patients by introducing patients’ proper 
reanimation surgeries [17]. Contemporary micro-
vasculo-neuronal reanimation surgical 
techniques, have created new hopes for enhanced 
helps in needy patients in their facial nerve 
reanimation surgery implementations [18]. 
Recent advances in neuroanatomy and 
neurophysiology of variety of reanimation 
surgeries, in regard to creating a better surgical 
techniques, have promoted needy patients better 
facial nerve rehabilitation and thus have created 
more improvements in their quality of life [19]. 
In recent years, remarkable progresses have been 
made, in patients smile quality. This mentioned 
advancements have provided patients, better 
social communication [20]. Reanimation 
surgeries, may be monitor and follow-up by the 
surgeons, results a better post-operative period 
by electrophysiological tools, are highly valued. 
This above mentioned care, helps surgeons to 
validate their service and plan for a better future 
of their surgeries [21]. During any meticulous 
facial reanimation surgeries, exact considerations 
of facial nerves, may safety have preserved. In 
selected masseteric muscle flaps, in providing 
mastication functions, can be examined with 
electrophysiological, and electromyographically 
apparatuses [22], [23]. Patients with facial palsies 
might be under physical and mental pressures. 
Such mentioned patients might get impulsive, 
agitated and even depressed. Before 
implementing reanimation surgeries, patients’ 
psychological and psychiatric positions are 
advised to be checked [24]. In instances, patients 
who get successful results in their reanimation 
operations, are usually happy and are pleased 
after surgery. Cases with bilateral facial palsies 
need to be investigated thoroughly. In recent 
mentioned individuals, their underlying problems 
might be examined more seriously, because 
besides their facial nerve damages, their other 
cranial nerves might be involved. With good 
clinical and para-clinical investigations in before 
cited patients, if no other serious underlying 
problems found, their prognosis of their bilateral 
facial nerve palsies recoveries, are likely [25].

2 Discussion

The significant result of this brief review article, 
relies upon its up-to-date information, regarding 
to different facial palsies operations, which being 
applied with different new techniques of facial 
reanimation surgeries. Due to before mentioned 
causes, patients who are suffering facial palsies, it 
is thus important to discover a style of solving 
their problems sophistically. To elucidate before 
mentioned patients ‘snags, operation techniques’ 
types which possibly may be chosen by surgeons, 
need to be current. Past operations styles for 
reanimation surgeries, have undergone changes.
Resulted facts in the past, showed facial reanimation surgery techniques, have undergone various bilateral useful alterations for patients and surgeons’ safety both. Above mentioned fluctuations applied by surgeons who have tried to apt into surgical techniques, to have less post-surgical complications, less time of surgical durations and higher patient satisfactions. Through means of time elapsing, and new ways of performing novel techniques in correlated to facial reanimations, surgeons have learned how to manage and how to choose suitable facial palsy patients, for having proper operations with proper modern surgical skills. Previous surgical experiences disclosed, facial reanimation practices have given rise from simple regional soft tissue transfers, into a form of facial regional musculo-vasculo-neuronal advancement flaps, for reconstructing patients with facial palsies. Subsequently, facial reanimation surgery techniques moved from previous mentioned methods into great advances of free tissue graft transfers by miro-musculo-vasculo-neuronal methods. Sure, more advanced new techniques are expected in the future, designed by accredited university departments, to scheme teaching course plans, by distinguished professors in training residents and colleagues.

3 Conclusion

Patients with facial palsies need to be acknowledged and need to be considered in their society. Due to patients’ facial palsies, which have happened unexpectedly, they have less desires to communicate socially, because of their facial imbalances which have resulted their speech and facial smiling’s disarrays. Those above-mentioned problems, disturb proper animating functions for their pleasant facial expressions. Recent innovative facial reanimation surgeries, are highly advised for these agontized patients. Surgeons by selecting accurate patients and operate them with modern and suitable surgical techniques, their appearances may get changed accurately. After a possible successful operation, patient satisfactions and hopes increase and naturally will cause positive effects on their confidence in expecting a better tone of life, for their future.

4 Competing Interests

No conflict of interest is existed in developing this article

How to Cite this Article:

Will be updated in the final version

References

17. Kim, M.J., et al., Comparative Study of 2 Different Innervation Techniques in Facial Reanimation: Cross-
Facial Palsy and Contemporary Reanimation Surgery: A Short Review